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PurchasingWorld

Helping you manage the business of buying

Vol. 28 No. 11-November 1984

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Cover photo: Deregulation is creating more options in transportation with better price alternatives, as illustrated by the van lines increasing attention to the industrial markets where they are offering more specialized services, such as "padded van service" for sensitive equipment shipments. *Photo courtesy of Allied Van Lines.*

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PW PREDICTS

Robert S. Reichard, executive editor

No big surge in labor cost

There's more good news on the labor front—developments that practically assure another six to 12 months of relatively low overall inflation rates.

The recently inked GM settlement, for example, will cost Detroit only 20% over the next three years—that's less than 7% at annual rate. Moreover, if the pact's productivity clauses live up to expectations, unit labor cost increases may be held to just a few percentage points. Equally encouraging is the new coal settlement which calls for only about a 4% annual increase in wages and fringe benefits.

If nothing else, the signing of these two pace-setting contracts may just about rule out any new big labor cost surge in the years immediately ahead.

Recent news on the buying front is equally encouraging. Detroit, for example, continues to press for long-term procurement contracts that will hold material cost increases to a bare minimum. Nor is this just limited to the auto industry. Buyers around the country continue to flex their muscles—and are keeping downward pressure on such key items as steel, nonferrous metals, chemicals, plastics, MRO items, and many components—with an added assist coming from low-priced imports which are pouring in at an increasing pace.

Upshot: With both labor and material costs under control, there's precious little to suggest any major cost surge on prices.

A similar optimistic scenario can be inferred by looking at the other potential cause of inflation: supply bottlenecks. Specifically, a combination of decelerating demand gains and increasing capital spending would seem to indicate that operating rates won't rise as much as had been feared earlier. The increased import levels are also helping.

Right now the nation's factories are operating at only about 83% of their potential—low enough to suggest substantial bargaining leverage for at least another few quarters.

The point to keep in mind here is that demand-pull pressures on prices only become a major problem when factory utilization rates go above 85%.

For further assurance that we're still in a "no-sweat" situation, take a look at continued relative stability in energy tags (see accompanying chart) and a bumper harvest which will limit food price advances.

It's not surprising that most economists and businessmen are also optimistic about avoiding serious price acceleration. A recent Conference Board survey of top corporate executives, for instance, shows that only 17% anticipate bigger hikes in 1985 compared to a year ago when 25% of these same respondents were predicting acceleration.

Business Economists tell much the same story. Their preliminary projections for 1985 (culled from a new National Association of Business Economists survey) call for only a 5.4% inflation rate next year.

Energy price trends

Recent trends to energy price moderation are likely to spill over into 1985. Indeed, quotes for petroleum-based products will probably stay pretty much where they are now. Other forms of energy—notably coal, natural gas, and electricity will be creeping up. But these advances are expected to stay in the single-digit range—in no case will they rise by more than 4%.

That's the rosy picture being painted by Department of Energy analysts in their first full year forecast for 1985—with the stable petroleum product price prediction based on the likely assumption that imported crude oil tags will remain at the current $29/barrel level.

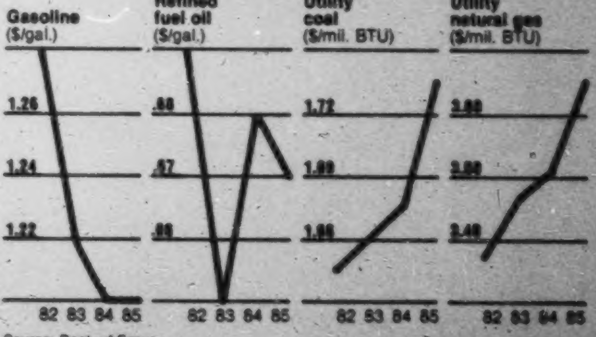
Another factor likely to keep a lid on oil prices: a flattening petroleum consumption curve—as continued conservation efforts and use of alternative energy sources offset a modest 2.8% increase in business growth.

The 1985 natural gas projection, calling for only a small 4% overall advance, is another favorable development. Just three months ago, these same analysts were betting on a big, double-digit annual increase.

Similar optimism is noted in coal where the new 3.6% growth projection for the first half of 1985 is well below projections made three months ago.

The new DOE report also spells out continuing progress on the energy conservation front. Next year, for example, the nation is expected to have an energy/GNP ratio of 45.0 thousand BTU per 1972 dollar of GNP—that compares to 45.4 this year, 46.0 last year.

Energy price trends



Source: Dept. of Energy

PW PREDICTS

Steel

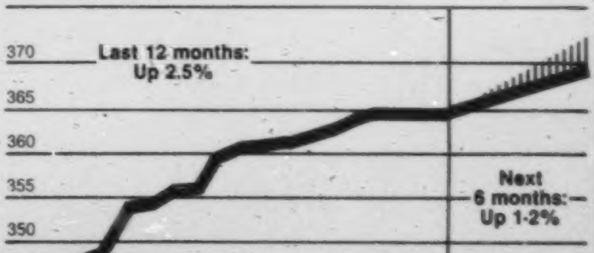
CURRENT SITUATION: The news is mixed. There's a high influx of imports as importers rush to get in under the wire for Washington's new voluntary restraint program. Ordering hasn't been all that sensational either. Fourth quarter shipments by domestic mills could fall by about one million tons from the second quarter level of 20.6 million tons. **Prices have tended to be soft—with discounts actually widening in several sectors.** Some grades of cold rolled sheet, for example, have recently gone for as much as 20% under official list levels.

DEMAND: Right now it's hard to see the overall 1984 shipment total going much above 75 million tons. That's considerably above last year's 67.7 million tons but far under forecasts made earlier this year. 1985 does look a bit better, but just how much better will depend on 1) the U.S. economy, and 2) how fast voluntary trade curbs can be worked out. **Best bet: An adequate but hardly spectacular 80 million ton year.**

SUPPLY: No problems anywhere—especially when you consider that the industry has been operating at under 55% of capacity in recent weeks. If everything goes according to plan, we probably won't see any rise above 80% next year. **Some new capacity may also be coming on stream**—perhaps another 2% next year to offset an unexpected 1984 cutback of the same magnitude. **Finally, there are the minimills** whose 20% share of the U.S. market is expected to grow by 5% within five years.

PRICE OUTLOOK: It will take time for tags to show any significant firming. Reason: Import restraints are not expected to be in effect until sometime next year. As such, recent big discounts will not disappear overnight. In the long run, however, higher tags are unavoidable—with the combination of **import curbs and somewhat improved consumption expected to add about 6-7% to going prices by sometime next year.**

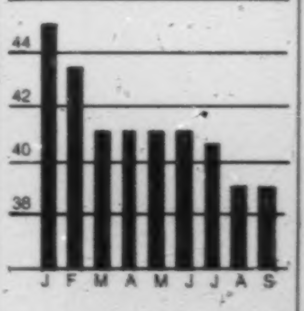
Steel mill products (list prices)
(Index: 1967 = 100)



Polystyrene

Recent attempts to post a 3¢/lb price increase have washed out—putting current market prices at around 39¢/lb. That's about 3¢/lb under early spring readings and far under the official 48¢/lb list. There is also some talk of increased imports from Brazil and Mexico if the dollar holds its value against their two currencies. Demand has not been that bad—with new estimates suggesting 1984 totals could run about 6% above last year's levels.

Polystrene (market price)
(¢/lb, gen. purpose/crystal)



Office equipment

Price cutting continues in the personal computer sector. Latest development here is the expected unveiling of the IBM-compatible Tandy model (1200 MD) which will sell for only $2,999, some $1,400 under the IMB PC XT model. 1985 seems to be shaping up as another good year for the overall office equipment industry, with projections of a 15% increase in dollar sales—just under this year's estimated 20% advance. Unit volume could be up by an even greater percentage as prices continue to edge lower.

Polyvinyl chloride

Look for the current weakness to persist for at least another few months as the big housing market continues to edge lower. It is hard to see transaction prices for the general purpose grade moving above the current 35¢/lb level—a far cry from the 40¢/lb and higher prices of just a few months back. Another price depressant may be overcapacity, with the industry expected to operate at only about 75% of its potential this year.

Polysilicon

This key raw material for semiconductor chips has become somewhat tight. Blame it on booming semiconductor sales (up about 50% this year). Spot prices have moved up sharply—with some material moving for as much as 36¢/lb—double the spot level of a few years back and well above the long-term contract $22.50-$27.00/lb range. The long term looks good with substantial new low-cost capacity expected by 1988. By then a 20% global surplus should make for significant declines in contract as well as spot prices.

Lead

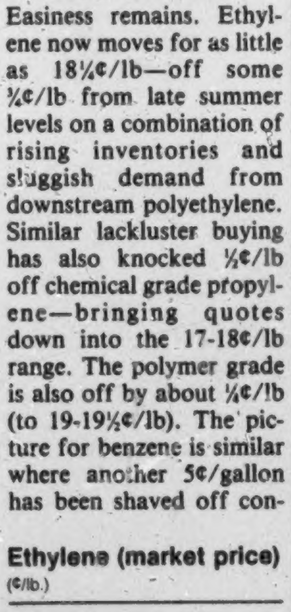
Still no sign of a rally—despite prolonged U.S.

strikes and the start of battery buying season (something which usually spurs major lead purchases). Reasons for the lackluster performance are not too hard to find. For one, 1984-85 battery buying will be hard put to equal last year which was hyped by extreme temperature shifts. Another factor could be continued output from struck U.S. facilities. Demand remains down as global consumption holds at about 1980 levels when industrial output was 10-15% lower.

Petrochemicals

Easiness remains. Ethylene now moves for as little as 18¼¢/lb—off some ¾¢/lb from late summer levels on a combination of rising inventories and sluggish demand from downstream polyethylene. Similar lackluster buying has also knocked ½¢/lb off chemical grade propylene—bringing quotes down into the 17-18¢/lb range. The polymer grade is also off by about ¼¢/lb (to 19-19½¢/lb). The picture for benzene is similar where another 5¢/gallon has been shaved off contract levels (to $1.27/gallon) with spot tags even lower.

Ethylene (market price)
(¢/lb.)



Paper

The long upward price trend seems to be temporarily running out of steam. Uncoated white paper prices (cut-sized 8½ × 11 sheet) have fallen about 8% since last spring. Reasons: increased domestic capacity plus import quotes below U.S. producer levels—with substantial shipments coming in from Mexico, Brazil, and Scandinavia enough to push imports here up 100% so far this year. The recent $30/ton increase in linerboard is also running into trouble. There is also some discounting in pulp. But newsprint and coated paper remain quite firm.

Natural gas

New Department of Energy projections for relatively stable prices are being confirmed by independent surveys. One, by Control Data Corp. covering 1,000 gas producing companies, finds no evidence of recent projections calling for 9-12% increases in 1985. Reason: competition is forcing renegotiation of many existing contracts—with revised pacts calling for lower prices. Another survey, by Washington Analysis Corp., suggests decontrol of new gas, instead of sparking a new spiral, will probably result in stable to falling wellhead prices.

Chemicals & allied products

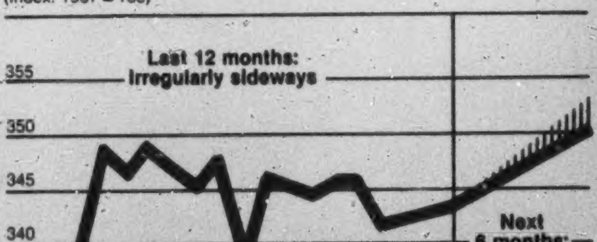
CURRENT SITUATION: Buyers remain firmly in the saddle. Take a look at the accompanying chart which suggests that **price averages are now actually running a bit under early 1984 levels.** Key product lines that have been experiencing softness include ethylene, propylene, benzene, toluene, xylene, phthalic anhydride, and most plastic resins and synthetic fibers. Increases that have been posted have met with significant buyer resistance.

DEMAND: All signs point to about an 8% increase in overall chemical and allied product production this year —just under the 1983 pace. The paint industry will do a lot better than average, as will farm chemicals. Shipment gains of 7-8% are expected for plastic resins. Synthetic fibers aren't doing that well. **For 1985—look for decelerating rates of gain—with a 4-5% gain for chemicals running ahead of the expected 3% GNP gain.**

SUPPLY: There's still more than enough to go around in most product lines. Operating rates tell the story here. Overall, the industry is producing at only about 73% of its potential—with the rate for basic raw chemicals at a slightly higher 78%. These low operating rates can be traced to strong import flow and reduced export demand. Continuing plant expansion is another factor—**this year capacity increased by about 3% and an even bigger 5% addition is expected for 1985.**

PRICE OUTLOOK: Boosts will be scattered and quite modest—because of a combination of continuing overcapacity, import competition, fairly stable petrochemical feedstock costs, and somewhat less ebullient demand. **Best bet: only a 2-3% advance through next spring, with a few products (like sulfur) rising a bit more.** Strong competitive pressures will limit hikes in both chemical building stocks and in downstream products such as plastic resins and synthetic fibers.

Industrial chemicals
(Index: 1967 = 100)



PW PREDICTS

Industrial price trends

Expect some modest price increase.

At least that's what Data Resources Inc. (DRI) cost forecasting formulas are suggesting these days. Analysts at the big Lexington, MA-based econometric consulting firm expect industrial goods price averages to move up about 5% next year and some 6.6% in 1986.

To be sure, that's not all that bad compared to the double-digit rates that prevailed as recently as 1980 and 1981. But they do represent some acceleration from 1983 (when prices rose only 1.1%) and from this year's estimated 3% advance.

Nevertheless, it's still basically a no sweat price situation—the table below details how some key product lines seem to be shaping up.

Price outlook through 1986
(Comparison of third quarter pricing)
(% change)

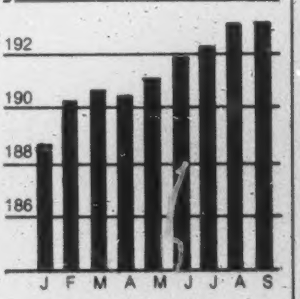
	1984/83	1985/84	1986/85
Raw materials, energy			
Finished lubricants	6.5	4.1	6.1
Industrial chemicals	0.4	5.3	7.0
Laminated plastic sheets	7.3	5.2	5.6
Unwatermarked bond #4	5.2	6.9	7.4
Pulp & paper products	9.1	6.3	7.3
Supplies for manufacturing	3.8	3.5	6.4
Metals			
H.R. carbon steel strip	6.6	5.0	6.5
Carbon steel plates	−0.2	5.0	8.1
Gray iron foundries	4.5	5.7	8.3
Domestic copper cathode	−13.7	17.0	6.7
Nickel cathode sheets	0.0	11.3	13.0
Aluminum base scrap	13.1	7.9	11.0
Components			
Miscellaneous rubber products	1.1	6.8	6.8
Hardware	2.1	4.9	5.8
Fasteners	6.0	6.1	5.6
Internal combustion engines	2.5	6.4	6.8
Relays	5.8	5.5	6.0
Linear ICs	4.7	0.0	1.3
Components for manufacturing	2.8	5.3	6.5
Construction products			
Prepared paint	3.0	5.5	5.2
Valves and fittings	4.0	5.1	7.8
Fabricated structural steel	1.8	6.6	8.5
Concrete ingredients	4.2	7.9	9.4
Sack mix	3.8	8.9	8.5
Machinery			
Warm air furnaces	3.6	5.1	4.6
Construction equipment	2.0	7.0	7.9
Metal-forming machine tools	2.7	6.6	8.6
Mechanical power transmission equipment	3.9	7.0	6.6
Integrated & measuring instruments	3.8	4.6	6.1
Oil & gas field machinery	0.6	5.9	8.3

Source: Data Resources, Inc., Cost Forecasting Service

Electronic components

Prices continue to slip in the big 64K DRAM market. One domestic producer has dropped quotes on volume orders to as low as $1.85—far under recent $3.60-$4.00 spot levels. The more powerful 256K DRAM is also lower with tags under $20 reported. Declines, too, are noted in the 64K static RAM market—with Japanese imports said to be available for only $18-$22—off substantially from the $25-$30 late spring level.

Electronic components
(Index 1967 = 100)



Aluminum

Production cutbacks have yet to stem the price slide. Further retrenchment (bringing the U.S. operating rate under the current low 77% level) may be needed. Signs of softness persist with the U.S. market ingot off another 5-6¢/lb since late August. Also, fabricated products have softened, particularly in common alloy sheet and extrusions. Fairly strong demand continues, with 1984 totals expected to be up 7-8%. But next year's gains should be smaller—somewhere in the 3-5% range. A price turnaround could be 3-6 months away.

Titanium

Mill product prices are beginning to firm—with boosts in the 2-3% range being posted on bar, billet, plate, and sheet. And similar increases are expected for the first quarter of 1985. Behind the increases: improving demand, with U.S. shipments expected to reach 42-43 million lb this year—up more than 30% from last year—and about 6-7 million lb of the gain coming out of inventories. Another smaller advance (to near 44 million lb) is expected for 1985.

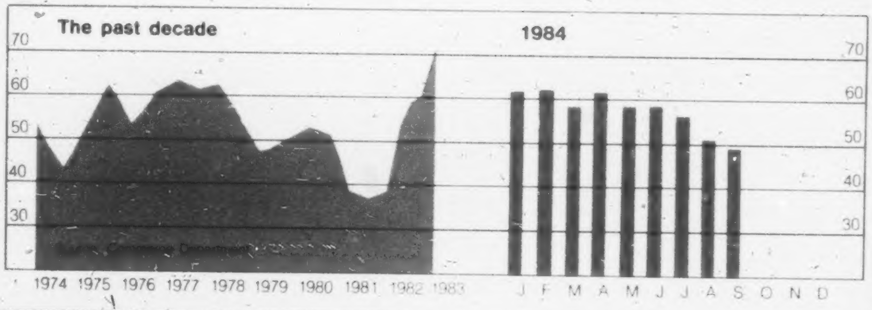
Copper

Still no sign of a price pickup. Despite some substantial stock reductions (500,000 tons on a global basis since January), producer prices continue to hover in the 60¢/lb+ level—the lowest in over two years. Another price depressant: larger import shipments in anticipation of quotas or tariffs which were nixed by the Administration. It now looks like further stock cuts carrying over into early 1985 may be necessary to justify a sustained upward rally—one that could bring tags back up into the 70¢/lb+ range.

BUSINESS DATATRAK

NAPM business barometer

Based on five indicators (employment, inventories, new-orders, production, vendor performance)



KEY ECONOMIC TRENDS

Growth has slowed to a crawl

That's not to say that GNP is not still heading for higher ground. Rather, the annual rate of increase has shrunk to about 2-3% for the current (fourth) quarter—a sharp deceleration from the 10% and 7% rates posted for the first two quarters of this year.

A similar picture seems to be shaping up for the first quarter of 1985. The NAPM Business Barometer (see chart) has dropped to near the neutral 50 mark—far under the 60+ readings for early 1984.

Equally sobering is the fact that new orders, though still high, have held steady since spring. This is probably why industrial production is beginning to level off (see chart).

Based on preliminary estimates, for example, fourth quarter output will only be up 3-4% at annual rate. And projections are calling for even smaller gains over the first six months of 1985—probably around 2-3% at annual rate.

Much of this deceleration will be a result of easing in the automobile and construction industries. Foreign trade trends are also sapping the strength of factory output—the strong U.S. dollar encourages more imports while at the same time making it hard for U.S. firms to increase their exports.

Some eye-opening figures: In recent months the trade deficit has been running at an annual rate of $140 billion—with imports rising nearly 30% ahead of a year ago.

The slowdown in production gains is beginning to have an effect on employment. The factory overtime rate has dropped to just over 3 hours/week from the 3.7 hours/week rate posted in April.

This suggests that further drops in the unemployment rate will be hard to come by. Indeed, the jobless level may remain at 7% through 1985.

In spite of these problems the economy will remain in the plus column. Capital spending for new plants and equipment will be up strongly through 1985—and these long leadtime items will have positive impact on the economy for at least another few quarters.

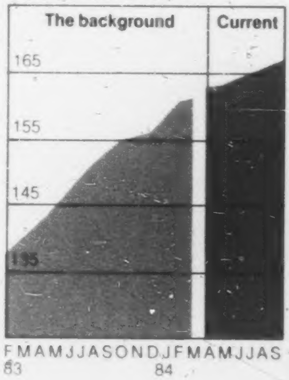
Even the hard-hit machine tool industry is looking better. There are still big month-to-month variations (see chart), but the trend is up—even in the face of continued import penetration.

The low inventory/sales ratio (currently at 1.35—far under the 1.74 peak of 1982) is another optimistic sign. If nothing else, the absence of buildup lessens the chance of a near-term inventory drawdown that might precipitate a recession.

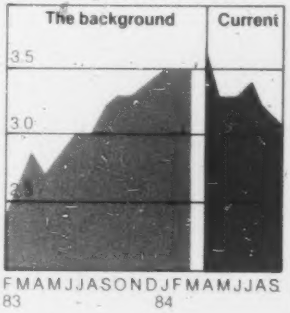
...continued

Leading indicators

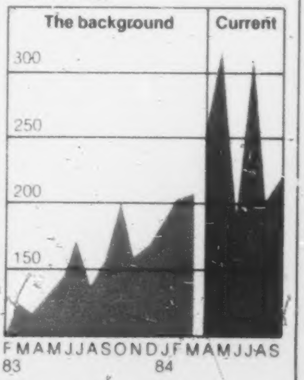
1. Industrial production
(Index: 1967 = 100)



2. Factory overtime hours



3. Machined tool orders
(Millions $)



Last but not least, the Fed may be having second thoughts about tightening credit screws another notch or two. Don't expect any major decline—but a half percent drop is likely in the next 30 to 60 days.

Big(ger) cars for '85 fleets

"Bigger" is in again—at least as far as 1985 fleet car buying is concerned.

While there is no real surge to the larger vehicles of the 1960's and 1970's, the trend to small compact and subcompact cars seems to have topped out.

So say the nearly 200 sales and service fleets responding to a new National Association of Fleet Administrators' survey. Specifically, only 31% of their anticipated 1985 fleet purchases are being earmarked for compacts and subcompacts—just about half the 60% figure noted last year in a similar survey.

The big shift is toward mid-sized vehicles which are expected to make up about 54% of the upcoming year's total fleet purchases (vs. only 35% last year).

There is also some increase in the percentage opting for larger cars (15% now vs. 7% last year). But note that the number is still relatively small and some of these large cars will be vans rather than conventional passenger vehicles.

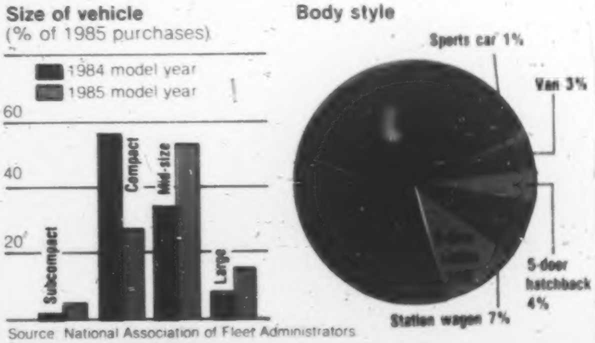
This year 3% of fleets will go for vans. In fact, some 15% of the surveyed fleets expressed interest in these bigger vehicles.

In conventional configurations, 4-door sedans will continue to make up the lion's share of new purchases (74%)—with other styles commanding the following share: 2-door sedans (10%), stationwagons (7%), and 5-door hatchbacks (4%).

Respondents also noted increasing interest in several options including cruise control, tilt steering wheel, and special door locks, the popularity of the latter two being attributed to the increasing number of women entering the fleet force.

Another interesting finding: for the first time in six years, economy of operation is not the most important consideration in fleet car selection: While still playing a major role, it is now topped by two other considerations: initial cost and depreciation resale value.

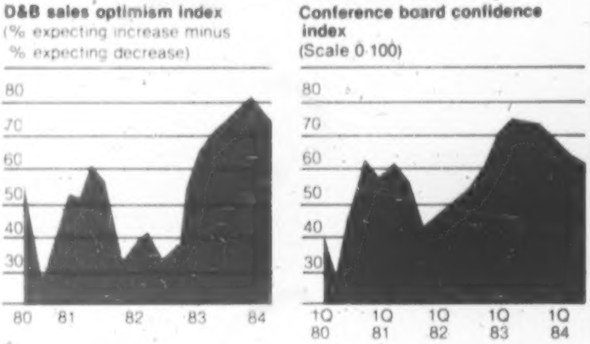
A 1985 fleet car profile


Size of vehicle
(% of 1985 purchases)

Body style

Source: National Association of Fleet Administrators

How top businessmen feel these days


D&B sales optimism index
(% expecting increase minus % expecting decrease)

Conference board confidence index
(Scale 0-100)

Optimism wanes a bit at the top

Top corporate decision makers aren't quite as optimistic as they were a while back (see accompanying chart).

Dun & Bradstreet's widely monitored Sales Optimism Index, for example, is showing signs of leveling off—suggesting that future gains could be somewhat harder to come by.

Also, the Conference Board's Confidence Index has been declining for several quarters. While the drop-off has been gentle (the index is still far above the recession lows), levels are now considerably under 1983 peaks.

Some of this is to be expected. As Lora S. Collins, Director of Business Conditions Analysis at the Board puts it, "since the expansion has been underway for more than a year and a half, business executives are less likely to report that conditions have been or will be improving markedly in the months ahead."

The Conference Board report has some good news to balance this new, more cautious mood. Surveyed leaders expect the prices of their products to increase only modestly through 1985. In fact, only 17% anticipate that selling prices in their industries will rise faster in 1985 than in 1984.

Why the toned down price expectations? It may be a reflection of the slower economic growth anticipated for the quarters immediately ahead. Another factor could be that price increases have been coming in under target—making many sellers realize that they are not going to get all the price boosts that they might want.

...continued

BUSINESS DATATRAK

CURRENT PRICES

Prices off except for paper lines

Things are still looking good, with industrial price averages off another 0.4% over the latest reported month. Current levels are now running about 1½% above a year ago. This is hard to believe given nearly two years of solid demand gain.

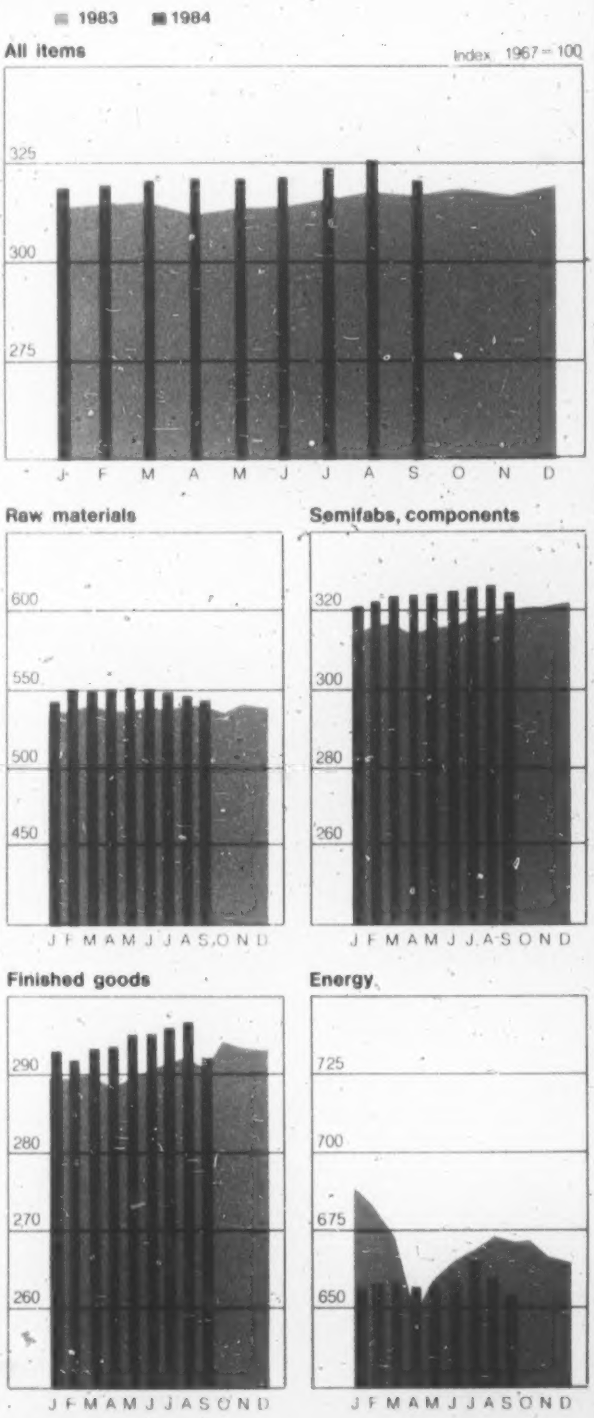
Paper lines are one of the exceptions with a strong rising trend—7% or higher year-to-year increases noted in such key sectors as corrugated, paperboard, and paper office supplies.

Energy tags, on the other hand, continue to slide—the overall year-to-date decline is now put at 2½%. Softness has been noted over the last month in lube oils, gasoline, home heat-

This month's breakdown

	Latest level (Sept.)	% change from: Month ago	% change from: Year ago
Bearings	344.1	0.1	3.6
Bolts, nuts, etc	276.8	−0.1	3.6
Chemicals, inorganic	295.8	0.5	1.9
Chemicals, organic	357.5	−1.8	−4.0
Concrete products	311.4	0.0	2.6
Corrugated cartons	268.9	1.6	10.3
Cutting tools, small	281.2	0.4	1.2
Electric lamps (bulbs)	332.0	−0.2	1.6
Electronic components	194.8	0.9	4.2
Fans and blowers	351.6	0.1	4.1
Foundry and forge products	362.6	−0.2	3.2
Fuel oil (residual)	1119.4	−2.9	1.6
Furniture, commercial	298.5	0.0	3.9
Gasoline	550.4	−0.8	−11.2
Glass, flat	217.9	−0.0	−5.1
Glass containers	364.6	−0.4	3.8
Gypsum products	356.1	0.9	19.6
Hand tools	359.7	0.2	2.6
Hand tools, power driven	225.1	0.4	1.8
Industrial furnaces	375.5	−0.1	3.3
Integrating and measuring instruments	230.2	0.4	3.9
Internal combustion engines	348.0	0.5	2.1
Lubricating oil	794.5	−0.4	2.4
Lumber millwork	307.0	0.3	0.4
Material handling equipment	290.6	−0.1	1.9
Metal containers	352.6	0.1	4.2
Metal mill shapes (nonferrous)	317.6	−1.2	0.8
Metal tanks	305.6	−0.2	0.7
Motors and generators	340.4	0.0	1.5
Motor trucks	267.8	−4.9	4.9
Office and store equipment	154.2	0.1	−0.1
Paperboard	288.2	1.0	13.5
Paper boxes and shipping containers	265.9	0.7	7.2
Paper office supplies	246.4	1.1	8.6
Paint	277.4	0.4	4.9
Plastic resins	311.2	0.6	2.9
Precision measuring tools	253.3	0.0	3.1
Pumps and compressors	349.6	0.4	1.0
Refractories	362.7	0.0	6.6
Rubber belts and belting	347.3	−0.5	6.7
Scales and balances	232.3	0.0	1.8
Steel products	364.8	0.0	2.8
Switchgear	273.8	−0.3	−0.1
Textiles, synthetic fibers	159.2	−0.4	0.8
Textiles, gray fabrics	154.5	0.1	4.9
Tires and tubes	244.7	0.2	0.9
Transformers and power regulators	228.5	0.2	1.6
Welding equipment	283.0	0.5	1.7
Wire and cable	201.0	−0.5	−1.6

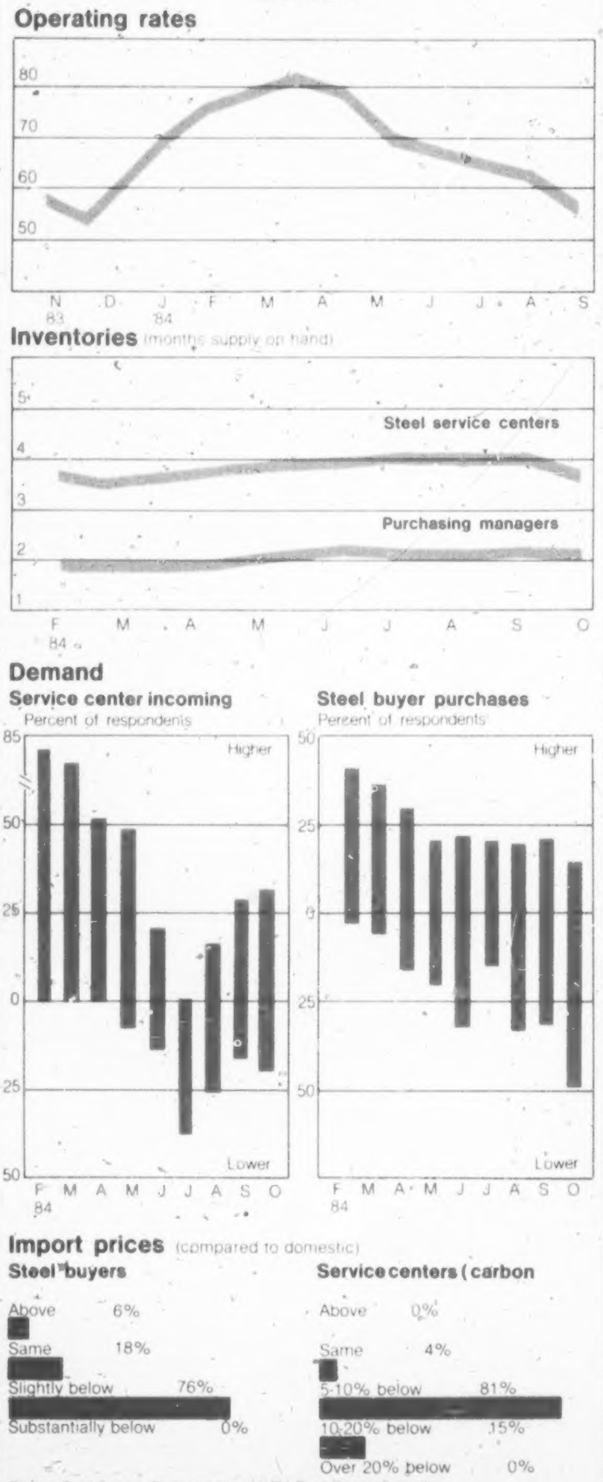
Industrial prices



Source: Bureau of Labor Statistics

BUSINESS DATATRAK

Steel



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

ing oil, diesel fuel, coal, and even natural gas. Only liquid petroleum gas edged up.

Metals also remain on the shaky side with new declines hitting aluminum, copper, lead, and zinc. Ditto steel where discounts have tended to widen as demand continues at disappointing levels.

Elsewhere in basic materials, new easiness was reported in scrap metals, industrial chemicals, rubber hose, synthetic fibers, wire, and cable—enough to offset increases in paints, gypsum products, lumber millwork, plastic resins, and non-automotive metal stampings.

On the upside were light trucks, truck trailers, pumps and compressors, welding equipment, and metalworking machinery. Balancing declines hit switchgear, heavy trucks, and plastic industry machinery.

Perhaps the most encouraging sign is the broad sweep of the current price lull. Declining or level quotes are now noted in nearly half of all the individual product lines monitored regularly by *PW* (see table). This has not happened for decades.

STEEL SCENE

Not much worry for steel buyers

Inventory paring could be one factor behind recent steel performance.

That's what new metal surveys seem to suggest. Stocks held by distributors responding to a Steel Service Center Institute (SSCI) study dropped sharply over the past month—falling from a 4-month supply down to under 3.7 months. That puts levels down to about where they were earlier this year before tonnages began to mount.

Metal users, responding to the latest NAPM steel buying survey, also indicate a decline—though the drop was somewhat less precipitous than that noted in the SSCI survey.

Both buyer and user groups seem determined to bring their holdings down even further. On the buyer front, for example, more than half the purchasing executives queried (52%) are aiming for lower stock levels over the next six months.

This seems to be true for service centers—despite the significant decline noted above. Indeed, some seven out of ten say they hope to have lower tonnages by the end of the year.

This basic optimism is clearly reflected in comments by SSCI executives. At a recent news conference SSCI president Andrew Sharkey and a panel of service center executives projected a 21 million-ton-year—up about 21% from the 17.3 million tons that distributors shipped in 1983.

Increased service center steel demand, says Sharkey, is attributable to overall increased demand by recovering industries and higher market penetration by the centers. On the latter score, distributors are expected to handle over 30% of the carbon industrial steel made in the U.S. in 1984—up from 20% in the mid-1970's.

Sharkey adds that the increased popularity of just-in-time delivery has clearly helped service centers—as mills have difficulty meeting stringent delivery schedules.

Despite this rosy picture, service centers do not anticipate procurement problems. Not one single distributor noted any potential headaches over the next three months.

And buyers would seem to agree for the most part. Only one item—coated sheet—seems to worry a few of them. But even here the number of concerned PMs is only one-third of those noted a few months ago.

Another area of agreement: the ready availability of low priced imports. Some three out of every four queried buyers, for example, report price breaks vis-a-vis comparable domestic metal.

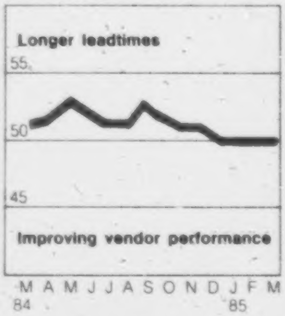
And the same is true of service centers who monitor carbon and stainless steel separately. In the carbon steel sector, some 96% say there are bargains—with 15% putting the savings in the 11-20% bracket. In stainless, all agree that imports are cheaper—and one out of five put the savings in the 11-20% range.

Service centers and buyers seem split as to their future dependency on imports. The service centers see a decline based on the expected imposition of new voluntary quotas. Steel buyers, on the other hand, are still counting on increasing metal imports over the next six months.

Monthly procurement status report

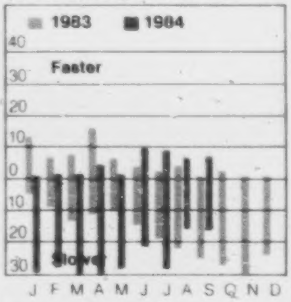
Leadtime index

A 'diffusion' index based on 158 key commodities. Above '50' indicates a tendency for leadtimes to stretch out. Below '50' suggests improving vendor performance

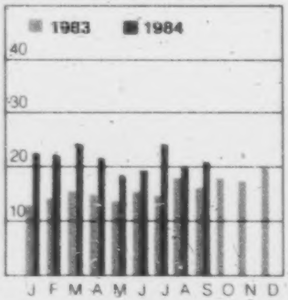


Delivery performance

Percent reporting deliveries

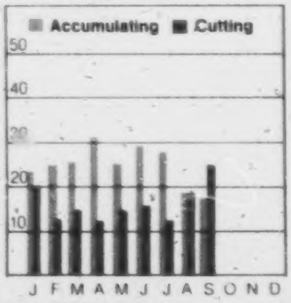


Forward commitments



Inventory strategy

Percent of respondents



Source NAPM

PROCUREMENT STATUS

Everything's coming up neutral

While there are still a few stretchouts and reductions reported, averages remain about the same, as witnessed by another neutral "50" reading on *PW*'s exclusive leadtime index.

It is significant that this is occurring during autumn which is traditionally the busiest time of the year for filling industrial orders. Almost every PM queried in *PW*'s latest "procurement status" survey notes a basically "no sweat" situation.

This picture is also confirmed by NAPM's Business Survey Committee which notes that the number of respondents reporting slower deliveries has actually continued to decline—only 14% at latest report vs. 28% two months ago and 15% last month.

Look at the narrowing gap of just 7% between those reporting lower (14%) and faster (7%) deliveries—in contrast to a 37% gap of only 6 months ago—and the same conclusion is evident.

Again the only real problem area seems to be in electronic components and integrated circuits. But even here waits are not as long as they were last spring.

Several reasons for the improving scenario are: more-than-ample capacity, a still rising level of imports, and a stable rather than rising order pattern.

As one buyer put it, "I thought fall would be the transition period from a buyers' to a sellers' market. But now I see clear sailing into 1985—and maybe even beyond that."

This conclusion seems to be confirmed by price changes. Over the last reported month, PMs noted more price decreases than at any time in a year and a half. Equally noteworthy: the number reporting decreases (12%) was not significantly under those reporting increases (19%).

Not surprisingly, PMs are keeping a tight rein on inventories. Indeed, more are now cutting than adding (the first time this has happened since 1983).

Leadtimes and availability

Chicago: Longer leads for pipes, valves, and fittings (2-3), wide galvanized steel sheet (15), and structural steel (3-6). There is less of a wait for aluminized steel sheet (5), chrome chemicals (1), and surfactants (½-1). Aluminum is unchanged (10-12).

Cleveland: Corrugated material is in to 2-3 weeks, while boxes hold at 3. Coil coatings have edged to 5 and maintenance paints have stretched to 4. Not much action elsewhere with these weekly waits: plastics (3-4), 2-ply fiber drums (2), and cold finished aluminum (14).

Los Angeles: Status quo here with these weekly leads: semiconductors (12), printed circuit boards (8), connectors (40), passive components (13), copper tubing (5-6), grey iron castings (4-6), insulation materials (6-8), pumps (8-10), fasteners (6-8), paint (3-5), and electro-mechanical components (6-8).

BUSINESS DATATRAK

Houston: MRO deliveries are a bit faster at 0-3 weeks. No problems anywhere else: all metals (0-2), forgings (5-7), control valves (8-26), chemicals (0-1), pumps (0-6) and high pressure heat exchangers (17-26).

Philadelphia: A mixed picture here. Moving out are standard fasteners (4), specialty fasteners (8-10), specialty bearings (18-20), and 5-10 HP motors (12). Coming in are 8031 microprocessors (stock to 10) and printed circuit boards (10-14). No change in pumps and valves (10) and steel sheet (1-2).

Pittsburgh: Multiwall packaging material is in slightly to 5-6 weeks. So is chipboard (to 2-3) and manganese (to 3). Unchanged are drums (1), corrugated containers and folding boxes (3-4), steel strapping (2-3), seals (1-2), and polyethylene and PVC (5-6).

Leadtimes (in weeks)

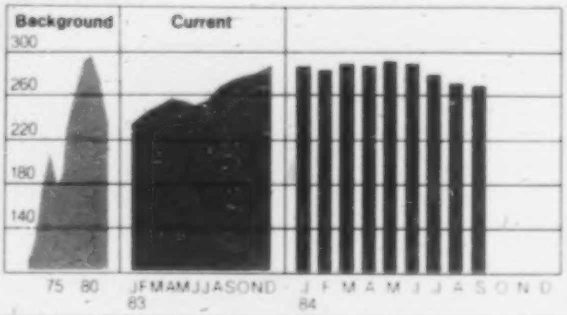
	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	9	9	9
C-R Sheet (Chgo)	5	5	8
Plate (Phil)	10	10	10
Plate (Chgo)	2½	2½	6
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	7	7	7
H-R Bars (Chgo)	3	3	3
Cold-Drawn Bars (Phil)	7	7	7
Galvanized (LA)	14	14	16
Galvanized (Chgo)	11	10	9
Structurals (Chgo)	4½	3½	3½
Structurals (Hous)	17	17	17
Tubing (Phil)	7	7	7
Grey Iron Castings (LA)	5	5	9
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	6	6	5
Pipe, Carbon (Hous)	13	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	17	17	16
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	7	7	13
ICs (Linear) (Phil)	20	20	20
Motors (Phil)	15	15	21
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	20	20	17
Relays (Chgo)	15	15	15
Resistors (Chgo)	14	14	10
Resistors, Wirebound (Phil)	10	10	10
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	2	2	1½
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	¼	¼	¼
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Napthalene (Chgo)	2	2	2
Paint (LA)	5	5	5
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	4	3½	3
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	3	3	3
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	1	1	2
PVC Resin (Pgh)	6	6	6
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	2½	3	3
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	4	4	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	11	11	15
Aluminum Plate (Chgo)	14	14	12
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	11	11	15
Brass Castings (LA)	7	7	13
Brass Rods (Chgo)	6	6	4½
Brass Sheet (Chgo)	9	9	17
Brass Tube (Chgo)	5	5	9
Copper Fittings (LA)	3½	3½	3½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	5½	5½	5½
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	4	4	3
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	5	5	8
Zinc (Pgh)	2	2	6
MISCELLANEOUS			
Bearings, Domestic (Phil)	22	22	12
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	50	50	48
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	1½	1½	1½
Fasteners (LA)	7	7	9
Fasteners, Std. (Phil)	4	2½	2
Heat Exchangers, Carbon-alloy Steel (Hous)	20	20	20
Heat Exchangers, Hi-pressure (Hous)	35	35	21
Insulation Mat'l (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	2½	2	2
Pumps (Hous)	35	35	35
Pumps (LA)	9	9	9
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	17	17	17
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Latest month	274.0
Month before	275.6
Year ago	267.9

Index: 1967 = 100



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	347.00
Steel, structural shapes, Pitts., cwt	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt	24.40	24.40	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	23.95	23.95	17.50
Steel, bars, Pitts., cwt	23.95	23.95	17.50
Steel, bars, C.R., Pitts., cwt	29.25	29.25	26.00
Steel, plates, Pitts., cwt	23.25	23.25	25.75
Steel, plates, H.R., Pitts., cwt	23.25	23.25	25.75
Steel, sheets, C.R., Detroit, cwt	27.10	27.10	26.15
Steel, strip, C.R., Chi., cwt	35.30	35.30	35.30
Steel, basic wire, Pitts., cwt	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.485	0.495	0.755
Antimony, in alloy, lb	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb	5.20	5.20	4.95
Brass, red, 85%, [sheet], lb	1.24	1.26	1.23
Brass, yellow, [sheet], lb	1.19	1.21	1.17
Cadmium, ton lots, lb	1.55	1.55	1.25
Copper, electrolytic, wire bars, refd., lb	0.62	0.65	0.65
Copper sheet, over 24 in., lb	1.33	1.35	1.32
Lead, common, N.Y., lb	0.22	0.26	0.25
Magnesium, pig ingot, [99.8%], lb	1.48	1.48	1.38
Mercury, 20 fl. lots, N.Y., fl	322.00	327.00	317.00
Molybdenum Climax Oxide/bags, lb	4.65	4.65	4.65
Nickel, electrolytic, producer, lb	3.20	3.20	3.20
Platinum, producer, oz	475.00	475.00	475.00
Silver, N.Y., oz	7.14	7.20	10.43
Tin, Straights, N.Y., lb	6.05	6.20	6.41
Zinc, Prime West, East St. Louis, lb	0.45	0.48	0.46
Zinc, die casting alloy, No. 3, lb	0.515	0.545	0.525
PAPER			
Uncoated book #3 offset, ton	850.00	850.00	730.00
Watermarked bond, ton	985.00	985.00	845.00
Gummed sealing tape, carton	15.65	16.02	15.44
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	495.00	495.00	475.00
Wrapping paper, std. distributor cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	350.00	350.00	290.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd	0.380	0.359	0.284
Cotton drill, 1.85, 59", 68x49, N.Y., yd	1.04	1.04	1.00
Cotton middling, 1", N.Y., lb	0.595	0.622	0.712
Printcloth, 48", 80x80, N.Y., spot, yd	0.79	0.77	0.74
Army duck, 37", 13 oz., yd	1.78	1.91	1.63
Blended printcloth, 64", 78x54, yd	0.77	0.77	0.74
20s combed yarns	2.10	2.10	2.10
Wool tops, N.Y., lb	3.60	3.60	3.60

	Latest price	Previous month	Year ago
CHEMICALS			
Acrylonitrile, tanks, lb	0.455	0.455	0.430
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	160.00
Benzene, petroleum, tanks, Houston, gal	1.18	1.28	1.50
Caustic soda, 76% solid, drums, carlots, cwt	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb	0.58	0.58	0.58
Formaldehyde, USP, 37% [12% to 15% meth.], tanks, lb	0.106	0.106	0.106
Glycerine, synthetic, tanks, lb	0.81	0.81	0.73
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.54	0.54	0.48
Naphthalene, crude, tanks, lb	0.22	0.22	0.22
Phthalic anhydride, tanks, lb	0.305	0.305	0.305
Polyethylene resin, low density liner film grade (market price), lb	0.35	0.35	0.38
Polypropylene, homopolymer grade (market price), lb	0.39	0.39	0.38
Polystyrene, general porpose grade (market price) lb	0.39	0.39	0.38
Shellac, bone dry, N.Y., lb	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb	0.35	0.35	0.35
Sulphur, crude, ex-terminal, Tampa, Fla., lt	147.50	147.50	132.50
Sulphuric acid, 66%, commercial, tanks, ton	56.85	56.85	56.35
Titanium dioxide, anatase, reg., carlots lb	0.69	0.69	0.69
Xylene tanks, gal	1.25	1.33	1.33
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	311.25	312.75	330.50
Lumber, 2x2, pine, mbf, cl	293.25	298.15	322.90
Plywood, plyform, ¾", msf, cl	576.75	576.80	546.70
Plywood, ⅝", msf, cl	384.45	373.08	357.15
Cement, bulk, ton, tl	63.75	63.75	61.79
Sand, ton, cl	6.20	6.07	5.96
Ready-mix concrete, 3,000 psi/cu yd., 15 cu. yd	46.84	46.87	45.73
Crushed stone, 1½", ton, cl	7.43	7.27	8.00
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.78	0.78	0.76
Gypsum sheathing, ½"x1"x8", msf, tl	207.22	205.57	171.46
Brick, common, per thousand, tl	174.38	173.08	172.05
Asphalt paving, AC-20	169.92	169.53	158.71
Concrete sewer pipe, 12", prem. joint, per foot, cl	7.08	7.04	6.66
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl	26.50	26.25	25.75
Fuel oil, No. 6 or Bunker C, N.Y. barge, bbl., reseller	31.00	30.50	31.25
Gasoline, 91 oct., reg., Los Angeles, rack, gal	0.810	0.740	0.758
Gasoline, 94 oct., reg., Chi., tank car, gal	0.803	0.796	0.858
Heating oil, No. 2, Chi., bulk, gal	0.820	0.795	0.828
Heating oil, No. 2, N.Y., bulk, gal	0.808	0.808	0.848
Heavy fuel, PS 400, Los Angeles, rack, bbl	26.50	26.50	26.25
Jet kerosene, gal	0.785	0.780	0.803
LP-Gas, propane, Okla., tank cars, gal [incl. discount]	0.42	0.41	0.49
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	89.00	87.00	82.00
Steel, No. 1, hvy., dlvd., Chi., ton	80.00	80.00	77.00
Copper, No. 1, East, wholesale buy, dlvd., lb	0.515	0.550	0.625
Copper, No. 2, East, wholesale buy	0.425	0.470	0.535
Brass, red, East, wholesale buy, dlvd., lb	0.475	0.515	0.585
Brass, yellow, East, wholesale buy, dlvd., lb	0.35	0.36	0.36
Alum., old sheet/cast, E., wholesale buy, dlvd., lb	0.305	0.340	0.475
Alum., mixed clip., E., wholesale buy, dlvd., lb	0.325	0.360	0.495
Zinc, old, East, wholesale buy, dlvd., lb	0.200	0.200	0.145
Lead, clean solids, East, wholesale buy, dlvd., lb	0.110	0.165	0.140
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	28.00	30.00	28.00
Paper, old corrug. box, dlr., N.Y., ton	23.00	25.00	22.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb	0.12	0.12	0.10
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb	0.37	0.37	0.33

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

Survey of the month

Import surge continues

"I just can't afford *not* to import these days."

Multiply this statement a few hundred times and you can pretty well project the findings of a new nationwide ***PurchasingWorld*** survey. In a nutshell—imports are "in" and they're likely to take an even larger share of the U. S. market in the quarters immediately ahead.

There are several reasons for the continuing surge—lower overseas labor costs, better foreign productivity, and the strong U.S. dollar. The latter may be the most important factor right now, say most of the survey respondents. Reason: The U.S. dollar has appreciated by almost 30% vis-a-vis 1980-82 averages. All else being equal, this means that overseas sellers can ship their products here for nearly 30% less.

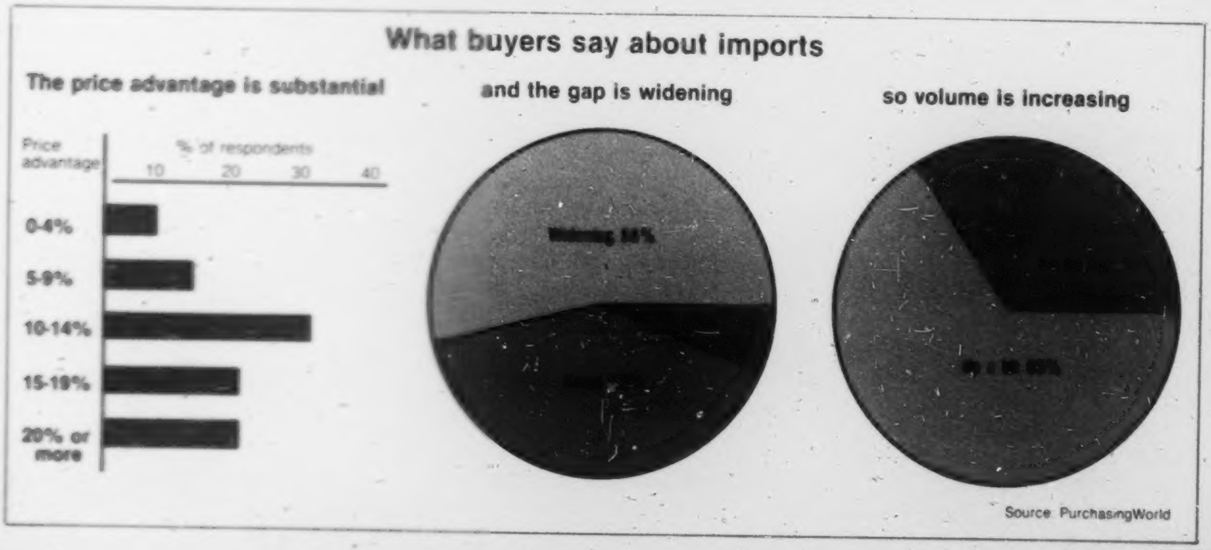
Survey buyers would certainly seem to agree—nearly 80% say that the dollar has helped keep import tags down.

Other key findings of the just-completed survey:

- **Current import price trends**: Averages have remained fairly stable over the past year—almost as many PMs report declines as report increases. Where changes have occurred, they have been small, generally ranging less than 5% on both the up-side and the down-side.
- **The widening advantage**: Since domestic price averages have crept up modestly over this recent period, it's not surprising that 55% of survey respondents report a widening import price advantage, compared to 40% who report no change and a small 5% who note narrowing.
- **Measuring the price advantage**: The average price break for foreign purchases is put at around 15%, although 20% of PMs reported savings of 20% or more. That 15% savings figure also represents the point at which most PMs would consider taking the import route.
- **Other importing factors**: Aside from price, higher quality is a major consideration. Other reasons noted for importing: availability, service, and the need for a bargaining lever to keep domestic suppliers on their toes.
- **The seller's role**: Rising import levels may also stem from greater marketing efforts by overseas sellers. The survey showed that three out of four buyers are reporting greater foreign sales efforts this year.
- **What's coming in?** A better question might be: what's not coming in? The list, already big last year, continues to grow—ranging from raw materials to finished products. The list includes chemicals, metals (steel, copper, aluminum, etc.), textiles, and plastics, as well as forgings and castings. But these hardly tell the whole story. Electronic parts, fractional horsepower motors, bearings, fasteners, and capital goods like machine tools and textile machinery are all high on the list of imported products. Even high tech imports—especially from Japan—are on the rise.

Perhaps the best indication of this import surge is an eye-opening estimate from the U.S. Commerce Department which shows that nearly 20 cents of every dollar spent by Americans is now spent for some kind of import. Consumer goods are certainly a part of this trend but the statistics suggest that a growing portion of the total is for industrial products.

Again, this trend is confirmed by the *PW* survey respondents—80% forecast increased import volume this year, 20% see no change in sight, and not a single respondent anticipates an import decline. **PW**


What buyers say about imports

The price advantage is substantial

and the gap is widening

so volume is increasing

Source: PurchasingWorld

Transportation deregulation is paying off

by Thomas F. Dillon, senior editor

Buyers are paying more attention to transportation, especially inbound shipments, and are taking advantage of carrier discounts and freight rate negotiating opportunities.

How are purchasing managers and buyers making out under transportation deregulation? What are they doing to take advantage of the opportunities it offers? To find out, ***PurchasingWorld*** conducted a reader survey and here is what it revealed:

- Almost half of the respondents (48%) say transportation deregulation has been an overall plus for purchasing.
- Nine percent say it has been a minus.
- Forty-three percent say it has made no change.
- Sixty-five percent say they have been able to reduce overall transportation costs and improve service.
- Eighty-two percent say they have been able to lower rates or improve service on some shipments.

When asked to check a list indicating changes in their company's transportation operations since deregulation, 24% checked "more attention paid to inbound shipments," 16% checked "more consolidation of inbound shipments," 10% checked "more use of contract motor carriers," and 8% checked "negotiated rate and/or service contracts with railroads."

Lower costs, better service

Senior Buyer Mary L. Duffy, Sandoz Nutrition, Minneapolis, MN, sums it up for many in purchasing when she says "We have become more aware of the costs of transportation...Now we specify carriers where we used to request 'best way.'"

Respondents say they have been able to lower transportation costs and improve service by taking advantage of carrier discounts and by reducing the number of carriers they use so they will have more clout with the ones who are left. More important, they say, deregulation has resulted in more attention being paid to transportation and to inbound shipments in particular. As one New Jersey glass company buyer puts it, "We are always looking for better shipping methods and ways to lower our transportation costs."

Opportunities

As a follow-up survey, ***PurchasingWorld*** checked with transportation experts for advice on how purchasing departments can reduce transportation costs.

Bob Bridges, Numerax Corp., a Maywood, NJ-based transportation information services company, sees many purchasing-related transportation savings opportunities available, including:

- working with suppliers with several shipping points to determine the least-cost shipping points to the buyer's plant,
- making use of chargebacks (charging back to suppliers excess transportation costs that occur when suppliers fail to follow routing instructions),
- and consolidating inbound as well as outbound shipments.

Bridges points out that with today's computer technology and carrier simplification programs, purchasing has an opportunity to become more familiar with transportation costs and the alternatives available. Rate comparisons that just a few years ago took tedious freight tariff research can now be made in seconds with sophisticated on-line computer systems.

Bridges also encourages purchasing to work with their traffic department, particularly in trying to balance inbound and outbound shipments. If a company can offer a carrier a two-way movement, the company is in a better position to negotiate lower rates and improve service on both the outbound and inbound movements. One step toward this goal, says Bridges, is to "take a look at the geographic concentration of the company's suppliers and then compare this with the locations of

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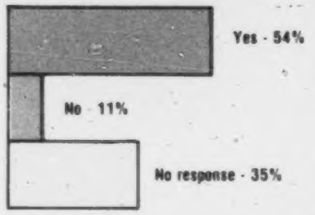
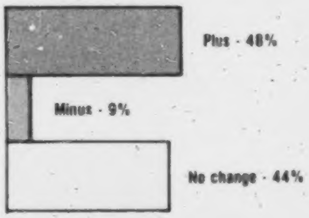
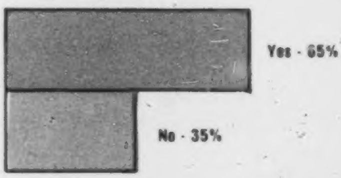
Since deregulation, have you changed the number of carriers with whom you do business?



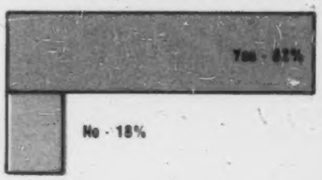
Has deregulation been an overall Plus or Minus for purchasing?



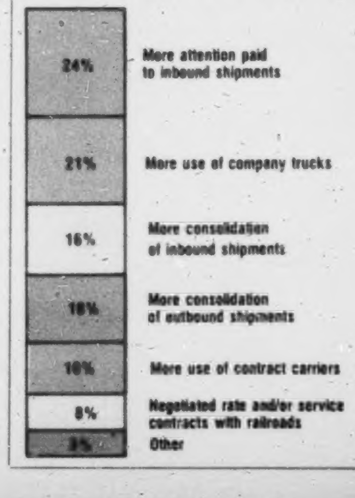
Have you been able to reduce transportation costs since deregulation?



Since deregulation, have you been able to negotiate lower rates or better service with carriers?



What changes have been made in your company's transportation operations since deregulation?



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the company customers."

Choosing carriers

Bill Whitener, vice president, marketing, Overnite Transportation Co., Richmond, VA, says that purchasing managers and buyers often choose carriers who can offer such nonprice but equally important characteristics as financial stability, a good claims record, broad geographic coverage, and a wide scope of service in terms of less-than-truckload, truckload, long haul, and short haul service.

"Choose a carrier with a good operating ratio (the ratio of operating expenses to operating costs). Generally, a good operating ratio and good service go hand in hand," says Whitener.

A spokesman for a Kansas trucking company suggests PMs get closer to sales reps. Because of deregulation, he says, there are some "real pricing bargains" available. Today, he points out, carriers can set prices a lot easier than they could before deregulation.

Check classifications

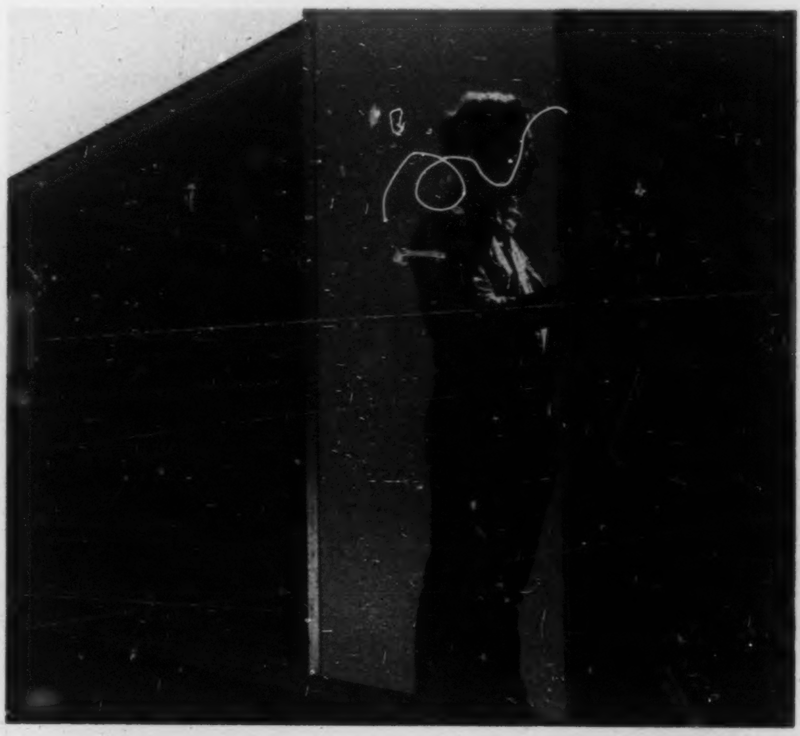
He, too, agrees on the importance of consolidating inbound shipments. He suggests checking the freight classification to make sure inbound freight is being properly described by the supplier and properly classified by the carrier. He also suggests trying to reduce the number of freight classes on your shipments by negotiating FAK (Freight All Kinds) rates with carriers. These rates simplify the rating process, reduce the chance of rate errors, and simplify freight bill auditing, thus saving time for both the carrier and the customer.

Several companies offer programs where they will analyze the type of freight shipped and arrive at an overall classification rating to cover all of it.

Some see such programs as a prelude to the day when carriers may offer to handle all of a company's freight transportation needs for a fixed dollar amount per month, or per year, as is already done in some other countries. In the U.S. today this may seem far-fetched, but many of today's common transportation practices were equally far-fetched just five years ago. **PW**

Household van lines—*much more than furniture*

Moving vans are carrying an increasing share of commercial and industrial shipments. Their service offers advantages not available from other carriers.



There are many good reasons why industrial firms are turning more and more to household goods carriers to move manufactured products. Van lines like North American, Allied, United, National, Aero Mayflower, Bekins, Atlas, Global, and Burnham—to mention only a few—have benefited from changes under the Household Goods Carrier Act of 1980 and the easing of regulations it brought to the industry.

Even before the Act, however, many household goods carriers had gained ICC approval to haul a broad classification of products referred to as "anything of an unusual nature" that could not be handled by regular common and contract carriers.

by Thomas F. Dillon
Senior Editor

Some van lines had, and still have, three types of authority: *household goods* authority, *special products* authority, and for some, such as North American, *commodity common carrier* authority.

Typically, household goods carriers have not handled general commodity freight. Instead they have organized special commodity divisions to handle shipments such as computers, cathode ray tubes, art and trade show exhibits, and electronics products in what the industry calls "padded van service." These shipments require the special care associated with handling household goods and are characterized by the use of extensive padding, logistics bars, strapping, tie downs, and air-ride vans to cushion them from

...continued

MRO overview

MRO demand bouncing back

Based on year-to-date data, as much as 18% increase in MRO sales could be in the offing this year.

More important to buyers is that the demand increase has not set off another big inflationary surge. This points to only about a 2½% average price increase this year—not much more than last year's small 1.2% advance and a far cry from the double-digit hikes in 1979, 1980, and 1981.

Talks with the industrial distributors who handle these kinds of items suggest that the price restraint is likely to spill over into 1985. Right now sellers are betting on only about a 3% overall increase for next year, a bit under the 5%-plus general inflation rate anticipated for that period.

That is not to say that distributors won't be trying for bigger boosts. Indeed, attempts are being made to post increases in the 5-8% range on several product lines. But it is extremely doubtful that many will hold in today's soft buyers' market.

Behind the price easiness: cutthroat competition. Observes George Hall of Detroit's Charles A. Strelenger Co., "It's a dog-eat-dog market as buyers press for concessions across the board."

This top industrial distribution executive singles out General Motors which he says continues to shop around for multi-year contracts at rock bottom prices.

Also adding to the profit squeeze of many firms is today's increasing buyer emphasis on just-in-time deliveries. It is forcing distributors to inventory a lot more than they did previously.

Some industrial distributors say they are being forced to guarantee prices for as long as a year which is still another sign that buyers are calling the signals.

Ample or even more-than-ample capacity could be another factor helping to hold tags down. That some items are in short supply reflects the fact that some manufacturers were caught short by the late 1983 and early 1984 ordering surge. Now they are beginning to catch up and the consensus is there should be more than enough to go around in the months ahead, thereby adding to competitive pressures.

Buyers seem to agree. Observes one purchasing VP, "We try to get vendors to hold prices or we go shopping." He singles out hardware where "If you shop you can almost always knock prices down."

Carbide cutting tools are also said to be soft, with the market nixing a recent 10% boost, primarily because of import pressures. And cast iron pipe fittings from Brazil and India have become so pervasive that domestic producers are asking for countervailing duties.

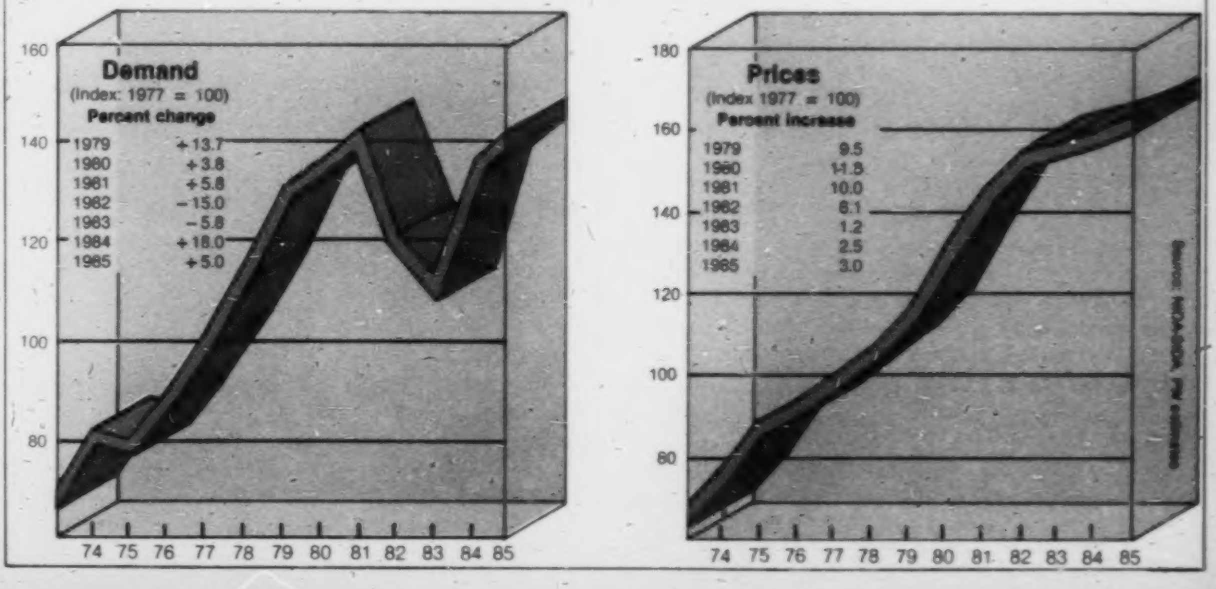
Distributors are beginning to worry about a leveling off in demand, noting that some of the recent 20% and higher gains vis-a-vis a year ago are starting to narrow. Indeed, the majority of sellers queried by *PW* see a level or only slightly higher trend in orders and sales over the next 6-12 months.

A slowing economy is the major factor behind this projection. But adding to the restraint is the continuing shift to smaller products and improved technology, both of which lead to less MRO use per unit of output.

Prevailing opinion is that 1985 sales gains will only be about 5%, give or take a point. This, too, should help keep a lid on tags. As one distributor put it: "If we couldn't post big hikes when sales were booming, how can we do it when they start to level off?"

Nevertheless, the industry hopes to roll with the punch and it is already adapting to a changing world by improving service levels, shifting to more long-term contracts, and taking on new items. **PW**

MRO trends into 1985



Source: NIDA-SIDA, PW estimates

Personal computers

Product profile												Company profile			Sales profile					Service profile					
Manufacturer & model	Mfr's suggested price ($)	Microprocessor word length (bits)	Std internal RAM (bytes)	Max internal RAM (bytes)	Std disk storage (bytes)	Max, opt disk storage (bytes)	Color display (std, opt, na)	Number of function keys	Graphics capability (std, opt, na)	Std operating system	Other operating systems	Annual sales (mil $)	Year founded	Primary business	Mfr-direct sales	Mfr-owned outlets	Distributors	Dealers/retail stores	Number of sales locations	Warranty period (months)	Mfr service contracts	Mfr-direct service	Mfr-authorized service	Other service	Number of service locations
A.B. Dick Co. (circle 301 on card)																									
Knowledge Worker 512K	7,500	16				40M	opt	10	opt			450		Printing equipment	•	•		•	580	3	yes	•			580
AT&T Information Systems (circle 332 on card)																									
6300 Dual Floppy Disk	2,810	16	128K	640K	360K		opt	10	std	MS-DOS	no		1983	Information mngmt systems	•		•	•	900	3	yes	•	•		1,500
6300 Hard Disk	4,920	16	256K	640K	10M		opt	10	std	MS-DOS	no														
Casio Inc. (circle 302 on card)																									
Casio FP-1000	3,000	8	64K		640K		opt	10	std	CP/M			1970	Electronic equip				•	80	3	no	•	•		6
Computer Systems (circle 303 on card)																									
PC-8088&PC-CAL	4,980	8/16	128K	640K	360K	1M	opt	10	std	DOS	yes		1967	Computers	•		•			V	yes	•	•	•	
Corona Data Systems (circle 304 on card)																									
PPC-22/PPCXT	2,595 +		256K	512K	-/10M	10M/-	opt	10	opt	MS-DOS		80	1981	Personal computers			•	•	9	3	yes		•		83
PB-400	5,095		512K	512K	10M		opt	10	opt	MS-DOS															
MP-10	6,310		256K	512K	-10M	43M	opt	10	opt	MS-DOS															
Datapoint Corp. (circle 305 on card)																									
VISTA-PC™	4,795	16	256K	1M	10M	10M	std	10	std	MS-DOS	no	540	1968	Computers	•		•		68		yes	•			
VISTA STATION-84™	8,550	16	512K	1M			na	10	na	RMS	no														
1560	3,995	8	128K	128K	5M	40M	na	10	na	DOS	yes														
8600	5,150	16	128K	512K	10M	130M	na	10	na	RMS	yes														
Datavua Corp. (circle 306 on card)																									
DU3000	4,995	8	64K	64K	5M	19M	opt	opt	opt	CP/M	yes	7	1972	Multi-user computers	•		•		100	6	yes	•	•	•	100
DU4000F	2,695	16	256K	1M	2M	2M	opt	opt	opt	C/DOS	yes														
DU4000W/DU4400	4,995 +	18/16	512K	1/8M	10/19M	80M	opt	opt	opt	C/DOS	yes														
Digital Equipment Corp. (circle 307 on card)																									
DECmate II	4,375	8	96K	512K	800K	10M	opt	100	opt	WPS	yes	5,580	1957	Computers	•	•	•	•			yes	•			
Rainbow 100	3,800	8/16	64K	512K	800K	10M	opt	100	opt	CP/M	yes														
MP-20	10,345 +		256K	512K	20/40M	43M	opt	10	opt	MS-DOS															
Digital Communications Assoc. Inc. (circle 308 on card)																									
IRMA Series	1,195									MS-DOS PC-DOS		51	1972	Micro and mini computers			•	•	50	12	yes	•		•	1
Eagle Computer Inc. (circle 309 on card)																									
Eagle Spirit-2/XL	2,695 +	16	256K	640K	360K	360K	opt	10	std	MS-DOS	yes	40	1982	Personal computers	•		•	•	300	V	yes			•	175
Eagle PC Plus 1/Plus 2	1,795 +	16	256K	640K	360K	360K	opt	10	std	MS-DOS	yes														
Eagle PC Turbo XL	4,995	16	256K	512K	380K	10M	opt	10	std	MS-DOS	yes														
Exxon Office Systems (circle 310 on card)																									
750 Workstation	8,950	8/16	768K	768K	10M	unltd	na	13	std	CP/M +	yes		1981	Office automation equipment	•		•		140	3	yes	•	•	•	525
510 Processor*	6,495	8	64K	64K	300K	300K	na	12	na	CP/M	yes														
520 Processor*	9,250	8	128K	128K	600K	unltd	na	12	na	CP/M	yes														
530 Processor*	13,750	8	192K	192K	600K	unltd	na	12	na	CP/M	yes														

Product profile												Company profile			Sales profile					Service profile					
Manufacturer & model	Mfr's suggested price ($)	Microprocessor word length (bits)	Std internal RAM (bytes)	Max internal RAM (bytes)	Std disk storage (bytes)	Max, opt disk storage (bytes)	Color display (std, opt, na)	Number of function keys	Graphics capability (std, opt, na)	Std operating system	Other operating systems	Annual sales (mil $)	Year founded	Primary business	Mfr-direct sales	Mfr-owned outlets	Distributors	Dealers/retail stores	Number of sales locations	Warranty period (months)	Mfr service contracts	Mfr-direct service	Mfr-authorized service	Other service	Number of service locations
Hewlett-Packard (circle 311 on card)																									
75C	995	8	16K	24K	na	na	na	na	na	BASIC	no	4,700	1939	Computers and instrumentation	●		●	●	200	3	yes				200
85B	2,295	8	32K	32K	270K	15M	na	12	std	BASIC	yes														
86B/87XM	1,595 +	8	128K	640K		15M	na	14	std	BASIC	yes														
110	2,995	16	272K	272K	710K	10M	na	8	std	MS-DOS	no														
150	3,495	16	256K	690K	540K	15M	na	8	std	MS-DOS	no														
Model 216 (9816)	3,985	16/32	128K	4M		65M	na	10	std	BASIC	yes														
Model 217 (9817)	6,500	16/32	512K	4M		65M	na	8	std	BASIC	yes														
Model 236 (9836)	12,110	16/32	128K	4M	540K	65M	na	10	opt	BASIC	yes														
IBM Corporation (circle 331 on card)																									
IBM PC/PCXT	1,995 +	16	256K	640K	360K	20.7M	opt	10	opt		yes		1924	Manufacture and sale of computers	●	●	●	●		V	yes	●	●		
IBM PCjr (diskette model)	999	16	128K	512K	360K	360K	opt	10	std		yes														
IBM PC AT	3,995 +	16	256K	3M	1.2M	41.2M	opt	10	opt		yes														
Kaypro Corporation (circle 312 on card)																									
Kaypro 2	1,295	8	64K		400K	800K	na	18	std	CP/M	no	12	1953	Computers				●	1,200	3	yes		●	●	1,300
Kaypro 4	1,995	8	64K		800K		na	18	std	CP/M	yes														
Kaypro 10	2,795	8	64K		10.4M		na	18	std	CP/M	no														
Lanier Business Machines (circle 313 on card)																									
Business Processor	2,995	8/16	196K	256K	600K	10M	na	69	opt	[1]		2,000	1934	Office automation	●		●		320		yes	●			320
Monroe Systems for Business (circle 314 on card)																									
MS 2000	3,095	16	128K	896K	720K	10M	opt	10	opt	[2]	yes		1912	Office products/ micro computers	●				250	3	yes	●			250
MS 2211/2221	3,395 +	16	128K	896K	1.4M	10.7M	-/std	14	std	[2]	yes														
MS 2212/2222	3,595 +	16	256K	896K	1.4M	10.7M	-/std	14	std	[2]	yes														
MS 2311	5,295	16	128K	896K	10.7M	10.7M	na	14	std	[2]	yes														
MS 2312	5,495	16	256K	896K	10.7M	10.7M	na	14	std	[2]	yes														
NCR Corp. (circle 334 on card)																									
Decision Mate V 8/16 bit	2,425	8/16	64K	512K	640K	30M	opt	20	std	[3]	yes	3,700	1884	Office and business machines	●			●	335	3	yes	●	●		350
NCR PC Model 4		16	128K	640K	320K	140M	opt	10	opt	NCR-DOS	yes														
NEC Home Electronics Inc. (circle 315 on card)																									
PC 8800 series	1,599	8/16	64K	128K	320K	15M	opt	10	std	[4]	no		1981	Electronic devices	●		●	●	400		yes	●	●	●	50
PC 8 200 series	599	8	16K	96K	320K		na	10	na	Prop	no														
Otrona Advanced Systems Corp. (circle 316 on card)																									
Otrona 2001	2,995	[5]	128K	640K	64K		opt	15	std	MS-DOS	yes		1977	Portable computers	●			●			yes	●	●		
Perkin-Elmer Data Systems Group (circle 317 on card)																									
Model 7350	7,000 +	32	512K	3M	15/28	15/28	opt	24	opt	UniPlus	yes	1,000	1938	Electronics	●		●		100	3	yes	●			50
Polymorphic Systems (circle 318 on card)																									
Poly 186	4,495	16	512K	2M	1M	250M	std	24	std	DOS	yes		1975	Computers	●		●	●	250	12	no	●	●		90
Plexus Computers (circle 319 on card)																									
P/35	17,950	16/32	500K	2000K	22M	235M	na	na	na	unix	no		1980	SMC systems	●				15	1	yes	●	●		

Product profile												Company profile			Sales profile					Service profile					
Manufacturer & model	Mfr's suggested price ($)	Microprocessor word length (bits)	Std internal RAM (bytes)	Max internal RAM (bytes)	Std disk storage (bytes)	Max, opt disk storage (bytes)	Color display (std, opt, na)	Number of function keys	Graphics capability (std, opt, na)	Std operating system	Other operating systems	Annual sales (mil $)	Year founded	Primary business	Mfr-direct sales	Mfr-owned outlets	Distributors	Dealers/retail stores	Number of sales locations	Warranty period (months)	Mfr service contracts	Mfr-direct service	Mfr-authorized service	Other service	Number of service locations
Sharp Electronics (circle 320 on card)																									
PC 5000 (Portable)	1,695	16	128K	320K	128K	360K	na	8	std	MS-DOS20		4,000	1912	Consumer/ind prod			•	•	400	3	yes	•	•		
Sperry Computer Systems (circle 333 on card)																									
3070-99 Model 10	**2,605**	**16**	**128K**	**640K**	**320K**	**60M**	**na**	**10**	**std**	**MS-DOS**	no	**5,000**	**1876**[6]	**Computer systems**	•				**72**	**3**	**yes**	•			**2,500**
3070-97 Model 20	**3,030**	**16**	**128K**	**640K**	**640K**	**60M**	**na**	**10**	**std**	**MS-DOS**	no														
3070-94 Model 30	**4,158**	**16**	**128K**	**640K**	**640K**	**60M**	**std**	**10**	**std**	**MS-DOS**	no														
3070-89 Model 50	**5,993**	**16**	**128K**	**640K**	**10.3M**	**60M**	**na**	**10**	**std**	**MS-DOS**	no														
3090-99 Model 100	**2,685**	**16**	**256K**	**640K**	**320K**	**60M**	**na**	**10**	**std**	**MS-DOS**	no														
3090-89 Model 500	**6,113**	**16**	**256K**	**640K**	**10.3M**	**60M**	**na**	**10**	**std**	**MS-DOS**	no														
Stearns Computer Systems (circle 321 on card)																									
Desktop Computer	2,995	16	128K	896K	640K	40.3M	opt	10	opt	MS-DOS	yes		1982	Micro-computers			•	•		3	yes		•		
STM Electronics (circle 322 on card)																									
STM PC-desk/portable	**2,499 +**	**16**	**256K**	**512K**	**360K**	**720K**	**opt**	**10**	**std**	[7]	no		**1981**	**Computer mfg**	•		•	•		**3**			•		
Texas Instruments (circle 323 on card)																									
Portable	2,295	16	128K	768K	320K	360K	opt	12	opt	MS-DOS	yes	4,500	1930	Computers and electronics	•		•	•	1,000	3	yes	•	•		375
TI Professional	2,495	16	128K	768K	320K	18.2M	opt	12	opt	MS-DOS	yes														
300 series	12,495	16	128K	1M	17M	43M	na	8	na	DX10	yes														
Toshiba America Inc. (circle 324 on card)																									
T300	**2,200**	**16**	**192K**	**512K**	**64K**		**std**	**103**	**std**	**MS-DOS**	**yes**		**1981**	**Office equipment**											
Vector Graphic Inc. (circle 325 on card)																									
Vector SX-1000/SX2000	2,995 +	8/16	128K	896K	0/1.4M	36.7M	opt	15	std	CP/M-86		30	1976	Micro-computers			•	•	350	3	yes		•		250
Vector SX-2500	4,295	8/16	128K	896K	5.7M	36.7M	opt	15	std	CP/M-86															
Vector SX-3000	6,295	8/16	128K	896K	10.7M	36.7M	opt	15	std	CP/M-86															
Vector SX-4500	8,895	8/16	128K	896K	28.7M	36.7M	opt	15	std	CP/M-86															
Vector SX-5000	9,995	8/16	128K	896K	36.7M	36.7M	opt	15	std	CP/M-86															
Visual Computer Inc. circle 326 on card)																									
Commuter	**1,995**	**16**	**128K**	**512K**	**360K**		**na**	**10**	**std**	**MD-DOS**	no	**50**	**1983**	**Portable PCs**			•	•		**3**	**yes**	•	•		
Wang Laboratories Inc. (circle 327 on card)																									
Professional Computer	2,445	16	256K	768K	360K	30M	opt	101	opt	MS-DOS	yes	2,100	1955	Office/DP	•	•	•	•		3	yes	•		•	8
Xerox Corporation (circle 328 on card)																									
Xerox 16/8	**2,895**	**8/16**	**128K**	**256K**	**348K**	**10.2M**	**na**	**18**	**std**	[4]	**yes**	**8,800**	**1906**	**Office systems**	•	•	•	•	**300**		**yes**	•	•		**200**
Zaisan (circle 329 on card)																									
ES.3 Prof. Workstation	2,595	8/16	128K	640K	360K	360K	na	10	std	MS-DOS	no		1983	Voice data equip	•		•	•	100	3	yes	•	•		100
Zenith Data Systems (circle 330 on card)																									
ZF-111-21	**3,029**	**8/16**	**128K**	**768K**	**320K**	**10M**	**std**	**13**	**std**			**250**	**1979**	**Desktop computers, video monitors/terminals**	•	•	•	•	**800**	**3**	**yes**	•	•	•	**500**
ZF-111-32	**3,449**	**8/16**	**128K**	**768K**	**640K**	**10M**	**std**	**13**	**std**																
ZWA/ZFG-121-22	**3,729**	**8/16**	**192K**	**768K**	**640K**	**10M**	**opt**	**13**	**std**																
ZW-111-32	**5,499**	**8/16**	**128K**	**768K**	**11.3M**		**std**	**13**	**std**																
ZWG-121-32	**5,599**	**8/16**	**192K**	**768K**	**11.3M**		**opt**	**13**	**std**																

* *With printer* V *Warranty period varies* [1] *CP/M, MS-DOS, LEX* [2] *MS-DOS, CP/M-86* [3] *CP/M80-86, MS-DOS* [4] *CP/M, MS-DOS* [5] *50 to 19,200 BPS* [6] *1876 Remington Rand; name changed to Sperry in 1955* [7] *MS-DOS-2.11*

NOTE

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Plastics shaping an uncommon design future

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PurchasingWorld

Helping you manage the business of buying

Vol. 28 No. 12-December 1984

Features

32 Paying for value or cost plus markups?
This month's negotiations column by well-known consultant Louis De Rose discusses the many risks PMs face in buying capital equipment because of contingency pricing. The cost plus rationale in pricing invites poor management by reversing the incentive of the seller and jeopardizing value to the buyer—two very strong reasons why equipment prices should be negotiated.

38* No sweat on the industrial price front
The heat's off, say the nation's PMs in this new and exclusive *Purchasing World* survey. Reasons for this new optimism include still ample capacity, intensifying foreign competition aided by a strong U.S. dollar, relatively restrained cost pressures from labor and energy, and the determination of buyers to hold the line.

50* Quarterly transportation report
Good news as rate hikes projected just three months ago for 1985 are expected to rise only 6% compared with an earlier (spring 1984) projection of 8%. That according to Wharton Econometrics which also has pared projections for 1986 from 4.9% to 4%. Big factors: reduced pressure on energy costs and somewhat lower-than-expected labor costs.

58 Buyers still calling shots in plastic resin industry
Today's huge price discounts tell a lot about an industry that has always been as competitive as the thermoplastic resins industry. List prices are little more than a starting point for serious negotiation as a spot check of volume purchases in this special *PW* report points out. What the future holds will in large part be determined by the impact of the bargain basement prices being paid for petroleum feedstock and the excess capacity that continues to plague the industry.

59 Plastics are shaping an uncommon future
PMs are being challenged to stay on top of new production applications for plastics. They must keep their companies competitive in price, quality, and service by taking advantage of the unique properties and possibilities of engineering resins. Here's a survey of some of the most recent design inroads that continue to sweep across the industry for engineering plastics.

Cover photo: courtesy of Owens-Corning Fiberglas Corp.

COST PLUS
PRICING STRATEGY

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PW PREDICTS

Robert S. Reichard, executive editor

Pricing restraint seen for 1985

It's beginning to look more and more like another good year on the industrial price front.

Buyers responding to the latest NAPM Business Survey Committee report, for example, note the fewest price increases and the most decreases since the current business upturn got under way in early 1983. More to the point: The 15% who were socked with hikes over the latest reported month were pretty much offset by the 13% who experienced declines.

Equally important, the nation's buying executives see continuing restraint for the upcoming year. This time the results are from a new nationwide ***PurchasingWorld*** survey. They suggest that the average overall increase in procurement costs will be about 4% next year—just one point above the 3% figure estimated for 1984 by these same buyers.

There is plenty of new evidence to back up this rosy forecast. Wage hikes are not accelerating as many thought they would. Hourly earnings in the non-farm business sector have gone up only 4.4%. And even this has been partially offset by a productivity increase of nearly 2.5% over the same period.

Another factor in the improving inflation outlook is the weakness in crude oil prices. While new OPEC curtailments have been announced, it is questionable whether they can be enforced. And even if they are, the move will only manage to keep prices where they are rather than send them climbing.

One should not underestimate the fact that energy, in addition to affecting almost every product sold, also has a psychological impact on the world market. It's no coincidence that the high and low inflation years over the past decade have almost perfectly correlated with sharp swings in energy costs.

DRI has actually quantified the relationship. The Lexington, MA-based econometric consulting firm figures that for every $2/barrel decline in oil that would continue into 1985, producer prices would drop by more than 1.2%.

The Federal Reserve Board also sees a connection. Preston Martin, vice chairman, believes the current oil softness means lower inflationary expectations—instead of the previously forecast 4-5% inflation rate for 1985, the advance could drop to as low as 3.5%.

Still another favorable sign has been the nearly 1% decline in interest rates over the past month or two. This small drop cannot be shrugged off; for money is a cost of doing business and when rates fall, inventory carrying charges and other financial expenses automatically decline.

Last but not least, there are today's expectations for slower overall business growth—perhaps 3% next year vs 1984's big 6-7% advance. If nothing else, this should ease demand-pull pressure on most prices.

Given all of the above, it is not suprising that most analysts are now in the process of revising their 1985 inflation estimates downward.

Price stability seen for oil industry

It is beginning to look like a good year for petroleum product users in 1985.

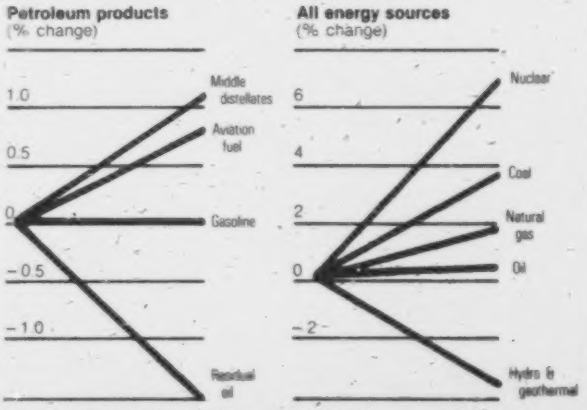
OPEC says it plans to reduce its daily output by 1.5 million barrels (to 16 million barrels). But given the expected increases in non-OPEC oil production and the endemic cheating on quotas by cartel members, the world price should remain at the current $29/barrel benchmark level.

This suggests that prices of gasoline and other oil products will remain at about where they are now through 1985—except for some seasonal boosts for heating oil this winter and gasoline next spring and summer.

Adding to the projection for relatively stable prices is the sluggish demand pattern seen for the upcoming year. As shown in the chart below, this pattern suggests that overall U.S consumption of oil will increase by only about ½% in 1985 (to nearly 15.9 million barrels per day)—not that much above the 15.2 million barrel low point of 1983.

Total U.S. energy usage probably won't be too bullish either. An increase of only 1.6% is being projected for 1985—as 1) GNP gains slow down and 2) energy consumption per unit of GNP drops for the 15th straight year. On the latter score, next year the U.S. economy will use 28% less energy per unit of GNP than it did back in 1970 before the big oil crisis.

1985 Domestic energy demand



Source: Independent Petroleum Association of America

...continued

Paper

CURRENT SITUATION: Price increases seem to be slowing a bit. The trend is still up, but future increases may be harder to come by—it took almost three months for the recent $30/ton increase in linerboard to take hold. A $29/ton advance in newsprint has been postponed until April 1, 1985. Demand, however, is brisk. **Overall paper and paperboard output this year may be up 6% from 1983.**

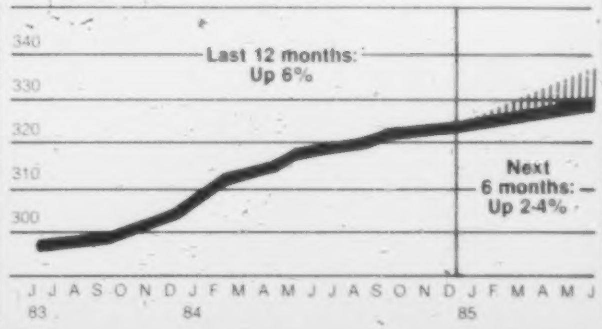
DEMAND: Next year's advance will be considerably under that of 1984—reflecting slowing GNP gains. Right now, **a 4% increase in overall domestic paper and paperboard output is seen.** Similar gains are projected for consumption where a positive net inflow of imports should boost total use to over 76 million tons. Corrugated shipments will rise by about 3.5% in 1985 while printing and writing papers could increase by around 4.1%. This could be a good sign as **printers' inventories are at their highest levels since 1980.**

SUPPLY: There should be enough to go around as 1.1 million tons of new capacity are added this year. And more should be on the way for 1985—reflecting capital outlays of nearly $7 billion this year. Imports should also help supplement supplies. **But no major drop in operating rates is seen. Average rates for 1984 came in at these high levels: uncoated groundwood (100%), coated papers (102%), uncoated free sheet (97%), unbleached kraft paper (99%), and unbleached linerboard (97%).**

PRICE OUTLOOK: Some increases would seem to be unavoidable. But the really big advances of 1984 seem to be over. For example, it's difficult to imagine a repeat of the past 12 months when these double-digit increases were posted: unbleached kraft linerboard (20%—to $350/ton), corrugated cartons (11%), 34-36 lb coated magazine paper (13%—to $850/ton), and watermarked bond (13%—to $985/ton). Best bet: **a 6% advance for 1985 as a whole.**

Paper and products

(Index: 1967 = 100)



Steel

Look for domestic producers to ship only about 17 million tons this quarter—keeping the yearly total to only 74 million—well under earlier projections. One result: falling prices with discounts ranging as high as 25% in such key products as cold rolled sheet, carbon steel plates, galvanized sheet, wire rod, stainless bars, and oil country tubular goods. But some modest recovery of about 5% or so is anticipated for early 1985 if voluntary restraints work as expected. Demand could improve next year—a drop of as much as 5 million tons of imports could push domestic shipments up into the 77-78 million ton range.

Aluminum

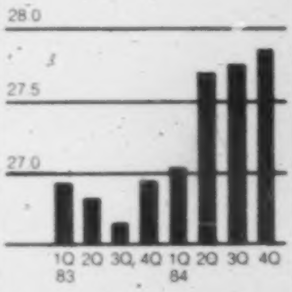
Production cutbacks are having a firming effect—with ingot crossing back over the 50¢/lb barrier. Orders are also up, but it would be unrealistic to expect any return to the 75¢/lb ingot level of earlier this year. Imports (mainly from South America) are up this year. Finally, demand will advance only about 5% worldwide this year. Upshot: Any further price boosts will be small—maybe into the 60¢ range by late next spring.

Fasteners

Some useful figures to ponder when planning your overall buying strategies for 1985 and beyond—based on a new report by Business Trends Analysts: 1) Imports will continue to represent a hefty slice of the market—15% currently with big incoming shipments from Japan, Taiwan, and Canada; 2) Fastener sales gains will slow down from about 10% this year to only 2.7% annually over the next decade; 3) Aircraft fasteners will remain a high growth area, while externally threaded non-aircraft types will still account for close to 40% of total U.S. shipments; 4) Sales on non-thread, non-aircraft fasteners make up a smaller 16% of the market.

Fastener price

(Index: 1967 = 100)

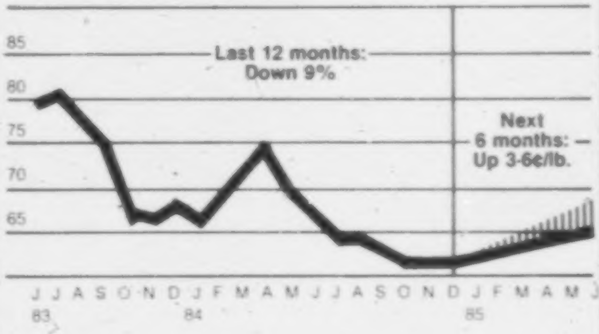


Computers

Figure on still more price erosion in 1985—caused by a combination of competitive infighting and new technological breakthroughs. Particularly vulnerable are small personal computers—especially home types which in some cases are now down to near $100. Micro computers are also edging lower. Best bet for the overall computer industry: about a 15-20% price decline for a given amount of com-

PW PREDICTS

Producer copper prices
(Cents per lb.)



Copper

CURRENT SITUATION: The red metal may finally be ready to climb out of its deep hole. Indeed, there has already been some recovery from the low 60¢/lb producer price of early fall. But tags are still under the nearly 75¢/lb level of this past April. And achieving black ink here in the U.S. is even further away—estimates are that our mines and smelters now need about 80¢/lb to break even. Behind the recent modest recovery: **Domestic production cuts, some solid demand gains, and slowly declining stocks.**

DEMAND: Domestic consumption could be up as much as 8% this year—bolstered by demand from the auto and construction sectors. Best bet for 1985: **about a 2-4% overall domestic gain, and a similar increase for the global market. But the longer-term prognosis is less bullish—with annual gains put at only 1-2%**—as the metal is hurt by substitution of fiber optics and reduced use per final product.

SUPPLY: There's still more than enough to go around. Global above-ground stocks still add up to nearly a 6-month supply, and Third World countries can easily increase supply levels. The slightly higher prices expected for 1985 could reactivate currently idled U.S. capacity a bit. **A key fact: World production is now at less than 80% of potential.** Finally, there is plenty of scrap around—now surfacing from the copper boom of the 1960's.

PRICE OUTLOOK: While further rebound is likely, a near-term bounceback to $1/lb quotes is unlikely. Higher prices will tend to spur more production, especially in some third world world countries where copper earnings are crucial to foreign exchange. Spurring this trend along is that even at 60¢/lb, many overseas producers can turn a profit. Best bet: **Modest increases with tags averaging around 70¢/lb for the first half of 1985.**

puter power—just about in line with reductions posted over the past few years.

Sulfuric acid

Prices are beginning to edge up in the Midwest—with all grades increasing about $10/ton. Behind the boost: a new plant shutdown lowering supply, and rising sulfur prices. On the latter score, the basic raw material for the acid has moved up twice over the past year. There is also talk of further advances as world markets remain tight (the global shortfall is currently estimated at over 3 million tons).

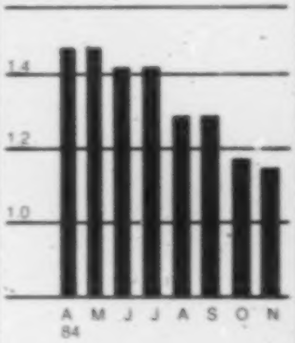
Robotics

Demand gains aren't likely to proceed at quite the breakneck pace envisioned as recently as a year ago—but they're still pretty impressive. International Data Corp. pegs the market at $700 million in 1989—implying about a 25-30% annual rate of growth over the 1983-1989 period. Projected year-to-year gains: 20% this year, 25% in 1985 and 1986, and 30% in 1987, 1988, and 1989. Biggest gains should come in assembly, painting, and arc welding—all of which are highly dependent on sensor developments.

Benzene

Don't count on current low prices ($1.21/gallon for contracts and $1.61/gallon on the spot market) to last too much longer. Reason: Production cutbacks should bring inventories back down to more manageable levels. Also price pressuring imports have leveled off—although nobody knows for how long. Best bet: a 5¢/gallon increase by yearend or early 1985.

Benzene (spot prices)
($/gallon)



Lead

Continuing domestic work stoppages are giving the metal a lift—with perhaps another few cents being added on to the going price as the battery buying season shifts into high gear and supplies begin to tighten up. In fact, the latter is already beginning to happen. LME and U.S. producer stocks are already off. But no real runaway price is anticipated—for strikes should be settled by yearend or early 1985. Demand isn't all that robust, although next year could see a modest 2-3% advance. Further advances depend on whether the metal can break into new usage areas such as PVC water pipe and roofing and asphalt

...continued

Big sales growth seen for low-end word processors

The low-end word processor boom still has a long way to grow. Prices are expected to decline from the current average of over $2,800 per unit to just over $1,800 per unit by 1988, say analysts at Frost & Sullivan.

They also predict these average annual changes over the 1983-1988 period: dollar sales (+23%), unit volume sales (+34%), and average unit price (−8%).

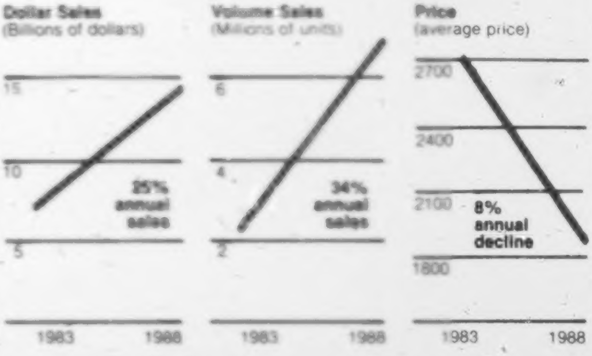
The findings, detailed in the accompanying chart, cover several types of equipment including stand-alone machines, electronic typewriters, and personal computers—all with the capability to operate independently as a word processor.

A spokesman for the big international research firm adds that growth will be uneven among the various types. Electronic typewriters, for example, are expected to lead the pack. Demand for these machines will increase as small businesses that do not require more complex equipment and larger companies who need simple workstations with communications capabilities place more orders. Expected growth in this area is projected at 50% annually.

The personal computer sector will also continue to experience rapid growth—unit sales should increase by 30% annually. On the other hand, stand-alone dedicated word processors sales are expected to decline.

Viewed from an end use market perspective, unit growth will range from 29% annually for major accounts to 49% for home use buyers. Government, educational, institutional, and small business unit growth will fall somewhere between these two extremes. In terms of actual shipments, major accounts will be responsible for over one-third of the 8.2 million units sold over the 5-year period, while home-use units will total less than 15%.

Low-end word processors



applications. But big tonnage is still years away at best.

Nickel

Still no sign of any near-term price recovery. Some of the easiness can be traced to demand which has moved up only slightly over the past year. More significant is the problem of oversupply. Currently the western world has 1.4 billion lb of effective capacity. Russia and Cuba have another 100 million lb and they are expected to increase exports to the Free World next year as a new refinery comes on stream. Upshot: There is no chance of the metal rebounding to the $3.20/lb level of several years ago.

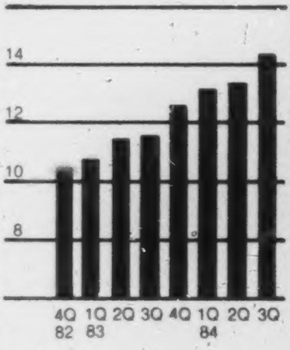
Rubber products

Industrial items should show only very modest growth next year. Tonnage gains, as estimated by the Rubber Manufacturers Association, are put at about 3% for each of the three major product lines—hose, flat belting, and V belts. Long-term (1984-1989) growth patterns are even less exciting—somewhere in the 2-2.5% range. All this would seem to suggest quite modest price advances of about 4-5% for both next year and through 1989.

Real estate

Office space seekers can probably look forward to more good bargains—as the overall vacancy rates in downtown areas rise to a new all-time peak of 14.2%—nearly triple the levels prevailing as recently as early 1981. Suburban vacancy rates are even higher (17.9%) on average. But getting a good buy on an industrial plant could be a bit harder. The 5.1% vacancy reading of late 1983 has slipped to 4.6%.

Office vacancy rates
(%)



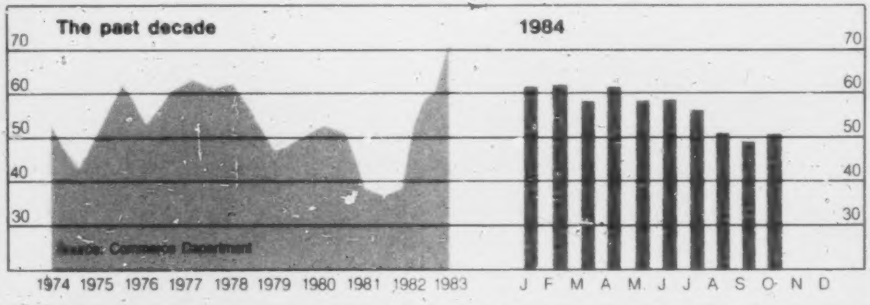
Zinc

Markets remain shakey with discounts as much as 2¢/lb reported off the official 45¢/lb domestic producer list. LME quotes are also soft—and the European producer price has dropped down to near $900/metric ton. Two other signs of easiness: 1) rising inventories and 2) new mine openings. The big problem is that there is too much supply chasing a limited market. This year, for example, the Free World will produce 5 million metric tons—some 200,000 above demand. Next year the surplus could hit 400,000 tons.

BUSINESS DATATRAK

NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance)



Source: Commerce Department

KEY ECONOMIC TRENDS

Slower growth, falling interest rates seen for 1985

Economic indicators are flashing mixed signals again. While there is enough momentum left to keep the GNP in the plus column through early 1985, the gains now look to be a lot less robust than they have been.

Recent readings of the NAPM Business Barometer point up the change. After running in the positive 55-60 range for more than a year, this key indicator is now down near the neutral 50 level.

A look at some of the key categories that make up the NAPM and other barometers also suggests an underlying change in the business climate.

Take capital equipment spending. This year's big 16% gain is expected to give way to only about a 10% boost in 1985. More important, since machinery prices are beginning to go up (vs this year's relative stability), the deceleration will be even more pronounced in real terms —with about a 15% increase this year slowing down to 5% next year.

Consumer spending, too, seems to be flattening out. True, the leveling off is at very high levels. But growth is dependent on change not on the level of spending.

Autos are a good case in point. Most forecasts call for about a 10.5 million sales total in 1985. That is good by recent standards, but it is no bigger than this year's estimated figures (see chart). Upshot: the big auto industry will be a neutral rather than a growth factor as far as next year's GNP gains are concerned.

A similar picture seems to be emerging in the construction industry. The total number of contract awards, a leading indicator of future building activity, has slipped a bit from recent highs (see chart).

Finally, there is a big drag caused by the large trade deficit which is running at double last year's level—a possible $120 billion. That represents the loss of domestic production, with a potential negative impact on employment, output, and even future capital spending.

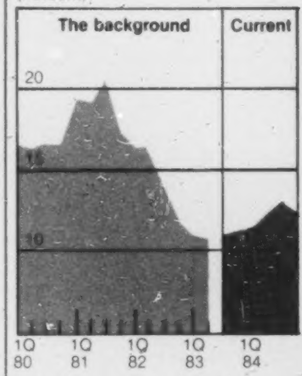
Given all of the above, it is difficult to make a case for anything resembling this year's estimated 7% real growth pace. Most 1985 forecasts are centered in the 2-3% range.

On the other hand, it should be emphasized that there is little to suggest any slippage back into the negative column. Factors that would seem to guarantee against such a development: (1) low inflation rates, (2) relatively low inventories vis-a-vis current sales levels, (3) still strong consumer optimism, (4) big government spending and a huge $200 billion federal deficit, and (5) recent declines in interest rates.

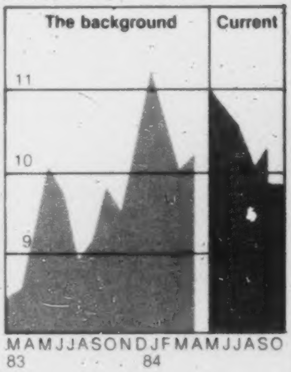
The latter two factors

Leading indicators

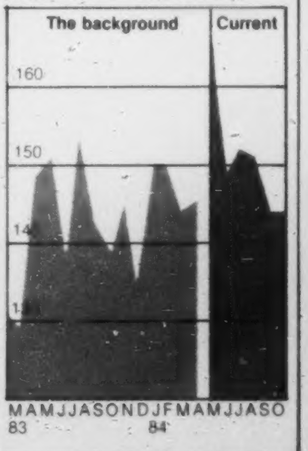
1. Prime interest rate
(Percent)



2. Auto sales
(Mil., seas. adj. annual rate)



3. Construction awards
(Index: 1977 = 100, seas. adj.)



cannot be underestimated. The additional money being funneled into the economy by Uncle Sam more than makes up for any reticence on the part of consumers and businessmen to increase their spending.

In short, fiscal policy is still strongly expansive.

And monetary policy—as measured by interest rates—may also be tilting away from restraint. Note from the chart, for example, that the prime rate is now edging under 12%—and could well drop into the 10-11% range by early 1985 if inflation stays low.

To sum up: the basic business outlook for the next few quarters is not all that bad. True, there is little that indicates a repeat of early 1984, but that may be all to the good because such fast growth is basically unsustainable.

Import price bargains going strong

If there is still any doubt about the pervasiveness of import bargains—take a look at the accompanying chart. Import tags have been outperforming domestic prices for eight straight quarters.

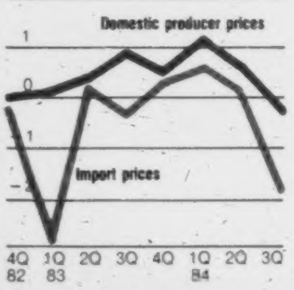
Credit much of the overseas advantage to a strong U.S. dollar. It has appreciated 9.1% against the trade-weighted average of all other currencies over the past year. And while all of this has not been passed on to U.S. buyers through lower prices, it has permitted foreign vendors to shave quotes when needed to nail down a sale.

The price gap between aggregate domestic and import prices has widened about 2.5% over the past year. Here's a detailed breakdown of happenings on the price front in the last three months:

- **Crude materials:** The overall drop from the previous quarter came to 1.9%—with big declines noted in oil, lumber, crude rubber, and metallic ores.
- **Chemicals:** A 1.9% decline reflects price fall-offs in fertilizers and pharmaceutical products.
- **Intermediate manufactures:** A 1.7% decline stems from drops in nonferrous metals, lumber and rubber products, and metal manufactures. Paper, steel, and textiles edged higher.
- **Machinery and transport equipment:** All subgroups registered declines—with the largest falls from the previous three months noted in electrical machinery (4.6%), office machines (2.7%), and general industrial equipment (2.1%). Telecommunication equipment also fell—sparked by new declines in video cassette recorders.

Import prices stay low

The overall trend
(Percent change)



Percent change over past year

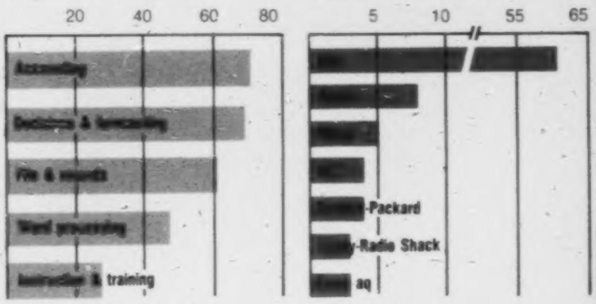
Crude oil	−1.3
Tires	−0.8
Paper & board	6.0
Iron & steel	8.4
Fasteners	5.2
Special machinery	−2.1
Metalworking machinery	−4.1
Material handling equipment	−4.3
Bearings	−4.4
Office machinery	−4.3
Electric machinery	−9.8
Electronic components	−18.2

Source: Bureau of Labor Statistics

Small business computers

How they're being used
(Percent of respondents)

Type of equipment
(Percent of respondents)



Source: Management World

Computers becoming an office "must"

Small business computers (defined to include personal, desktop, and microcomputer models) are fast becoming a "must" in the typical U.S. business office. More than nine out of ten queried firms use, or are planning to buy some type of computer.

That figure, culled from the new *Management World* survey of 500 key business outfits, suggests that computers have become indispensible—standard pieces of equipment to go along with typewriters and the ubiquitous office copier.

Accounting remains the number one use of computers with 71% of respondents saying that they use them for this purpose. Decision-making and forecasting is a close runner-up with 70% of respondents citing this pur-

Not surprisingly, IBM remains far and away the choice of the vast majority of buyers. More than three out of every five put an IBM system in the top spot. Apple still remains in second place—although its current 8% market share represents a sharp drop from last year's 23% reading.

Other key findings of the just-released survey:

- Financing: Some 88% of the firms with computers say they purchased their units outright.
- Communications: Almost half the respondents use small computers to communicate with other computers—up from 42% last year.
- Control: Most firms are now opting for centralization. More than three out of five survey respondents have a formalized policy covering acquisition, installation, and use.

CURRENT PRICES

Industrial prices holding, some hikes possible

Industrial prices edged up fractionally this past month—but no more than they have in other recent months. Year-to-year comparisons remain as favorable as ever—with averages running only about 1.5% above the late 1983 readings.

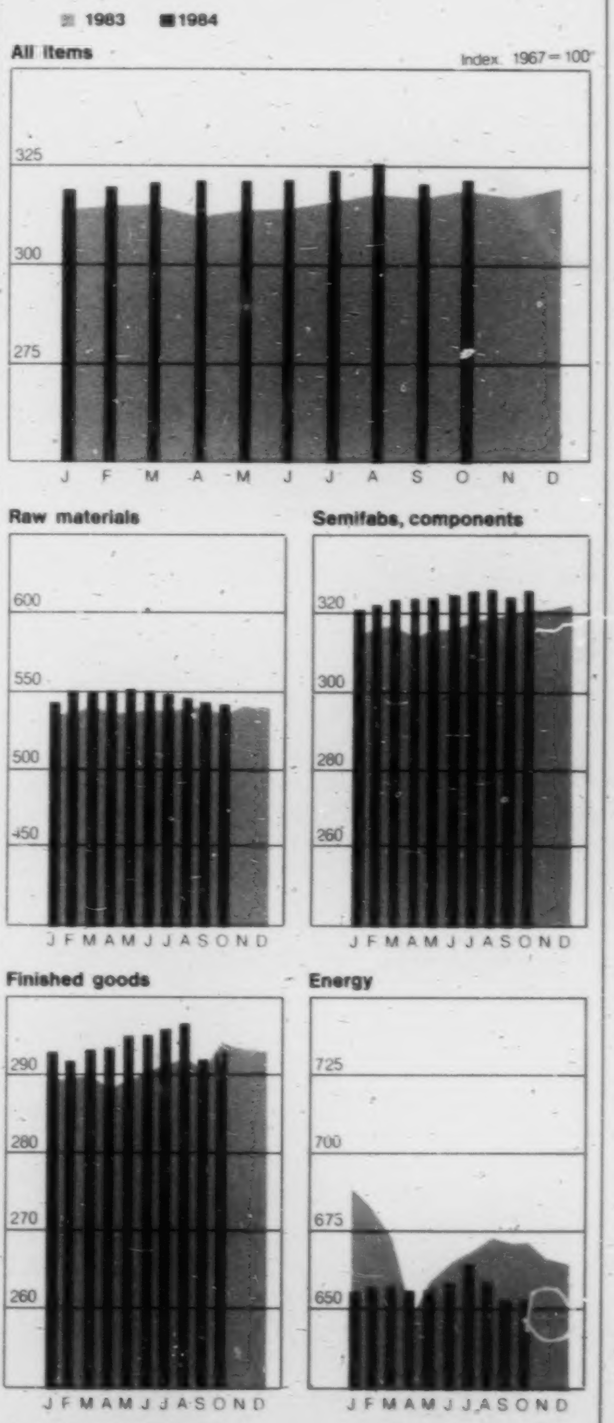
Softest areas this past month were in the fuel-derived product lines—especially chemicals and plastics where declines of about 1% were reported. Moreover, the actual slippage may be even greater when all the discounting noted in these sectors is taken into account.

Competitive pressure is also exerting a downward push on textiles. This is particularly evident in the

This month's breakdown

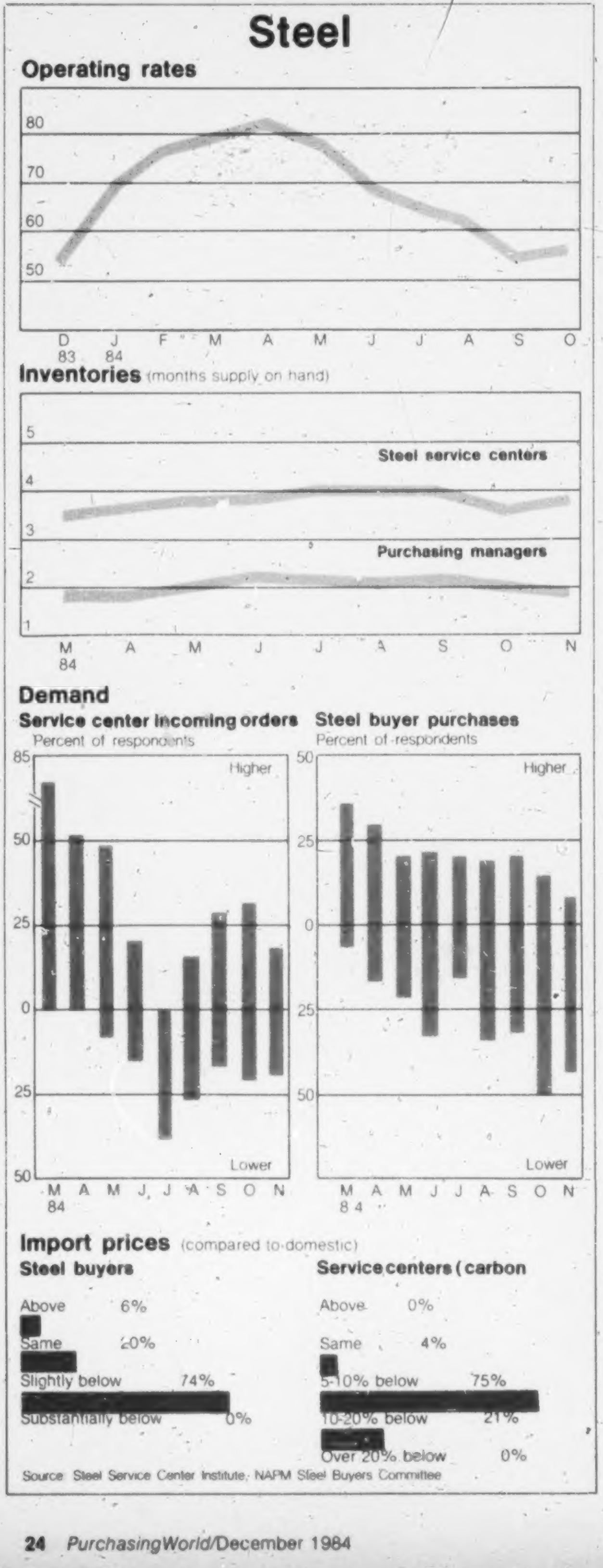
	Latest level (Nov.)	% change from: Month ago	Year ago
Bearings	345.1	0.3	4.0
Bolts, nuts, etc	277.4	0.2	2.6
Chemicals, inorganic	297.4	0.5	2.2
Chemicals, organic	353.8	−1.0	−4.6
Concrete products	311.5	0.0	2.7
Corrugated cartons	275.2	2.3	11.5
Cutting tools, small	282.8	0.6	1.8
Electric lamps (bulbs)	336.0	1.2	2.8
Electronic components	195.8	0.5	4.8
Fans and blowers	351.5	0.0	4.5
Foundry and forge products	363.3	0.2	3.2
Fuel oil (residual)	1113.2	−0.6	−0.6
Furniture, commercial	298.0	−0.2	3.7
Gasoline	560.6	1.9	−8.4
Glass, flat	218.0	0.0	−5.1
Glass containers	364.8	0.1	4.2
Gypsum products	339.4	−4.7	8.5
Hand tools	364.4	1.3	3.7
Hand tools, power driven	226.4	0.6	2.5
Industrial furnaces	376.5	0.3	2.4
Integrating and measuring instruments	230.2	0.0	3.9
Internal combustion engines	347.1	−0.3	3.6
Lubricating oil	794.5	0.0	2.4
Lumber millwork	306.6	−0.1	−0.3
Material handling equipment	290.6	0.1	1.9
Metal containers	358.0	1.5	5.8
Metal mill shapes (nonferrous)	315.5	−0.7	0.7
Metal tanks	305.7	0.0	0.6
Motors and generators	343.1	0.8	2.3
Motor trucks	289.6	8.1	3.5
Office and store equipment	154.0	−0.2	3.7
Paperboard	291.8	1.2	13.4
Paper boxes and shipping containers	269.8	1.5	7.9
Paper office supplies	243.5	−1.2	7.1
Paint	278.1	0.3	5.3
Plastic resins	308.9	−0.8	3.3
Precision measuring tools	254.8	0.6	4.3
Pumps and compressors	350.4	0.2	1.4
Refractories	362.7	0.0	5.2
Rubber belts and belting	349.3	0.6	6.0
Scales and balances	232.3	0.0	1.7
Steel products	366.0	0.3	3.0
Switchgear	274.5	0.3	0.3
Textiles, synthetic fibers	158.2	−0.6	−1.4
Textiles, gray fabrics	154.7	0.1	3.5
Tires and tubes	245.8	0.4	1.3
Transformers and power regulators	228.1	−0.2	2.5
Welding equipment	284.3	0.5	2.1
Wire and cable	200.9	0.0	−1.3

Industrial prices



Source: Bureau of Labor Statistics

BUSINESS DATATRAK



Steel

Operating rates

Inventories (months supply on hand)

Demand

Service center incoming orders — Percent of respondents

Steel buyer purchases — Percent of respondents

Import prices (compared to domestic)

Steel buyers

Service centers (carbon

Source: Steel Service Center Institute; NAPM Steel Buyers Committee

synthetic fiber area where prices now run 1.5% under comparable year-earlier readings.

Construction materials are relatively mixed. True, there were substantial increases last month in structural metal products, softwood lumber, and asphalt felts and coatings, but they were offset by declines in gypsum and plywood.

Energy is also mixed—resulting in an overall "no-change" month. But here, too, there were significant individual shifts—with diesel fuel and kerosene on the upside—balanced out by drops in electricity, coal, residential fuel and liquified petroleum gas.

Paper continues to drift upward—sparked by increases in paperboard and cartons. But here, too, there is some good news as paper office supplies dropped more than 1%.

Where do we go from here? Some Washington officials see a temporary upward blip in January since that is traditionally the time to test the water with new hikes. But these same analysts hasten to add that many of the boosts may not stick or may be watered down by competitive market pressure.

STEEL SCENE

Metal purchases to be reduced somewhat

Don't look for any late fall-early winter pickup in overall steel buying.

At least that's what PMs have been telling the NAPM Steel Committee Survey these days. Specifically, some 44% say they will reduce their metal purchases over the next three months—far outpacing the small 12% who see some increases ahead.

You have to go back to late 1982 to find a bigger percentage pondering a reduction. The fact that the 12% who expect gains is the smallest such number in two years isn't all that encouraging.

Distributors responding to the latest Steel Service Center Institute (SSCI) survey aren't too bullish either—though the gap between those expecting a drop in increasing orders (20%) and those anticipating increases (17%) is a lot narrower.

One reason for the less pessimistic view on the part of the service centers may lie in the fact that they have far outpaced the mills in shipment gains this year.

The 21 million tons of steel they expect to sell this year, for example, represents a healthy 19% increase over 1983 levels—far above the 10% increase projected on the mill level.

Not surprising then, service centers see the current slowdown as a temporary blip. As such, expect things to pick up as 1985 wears on. Thus Andrew Sharkey, SSCI president, sees 1985 member company sales up another 4-5%—or 800,000 to one million tons—bringing the total for the year to nearly 22 million tons.

...continued

Sharkey hastens to add, however, that his projections are also predicated on distributors continuing to capture an increasing share of the overall steel market.

Recent trends would certainly seem to support him on this point. Thus over the last five years, the amount of carbon industrial steel passing through distributors has risen from about 20% to an estimated 31%.

And, as the SSCI president says, the percentage should grow even larger over the next few years, as the just-in-time inventory concept (with its reliance on nearby distributors for quick, reliable deliveries) continues to attract more and more purchasing managers.

But despite this optimistic long-term appraisal, the majority of service centers will probably exercise extreme caution in monitoring their inventories over the next few months. One reason: aside from expectations of lower near-term user demand is that they can probably refill their shelves quickly if demand proves stronger than anticipated.

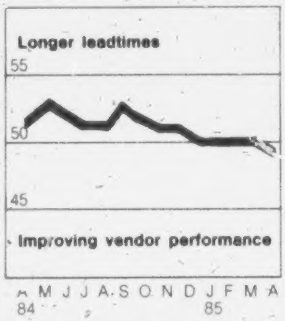
In any case, the fact that 66% of the queried service centers plan to reduce stocks over the next three months has to be regarded as significant.

Steel buyers, too, seem to be thinking in terms of inventory retrenchment—with 50% hoping to pare stocks over the next few months—in sharp contrast to the only 6% talking of a buildup.

Monthly procurement status report

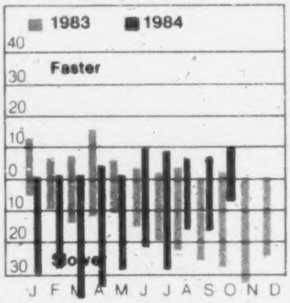
Leadtime index

A 'diffusion' index based on 158 key commodities. Above '50' indicates a tendency for leadtimes to stretch out. Below '50' suggests improving vendor performance.

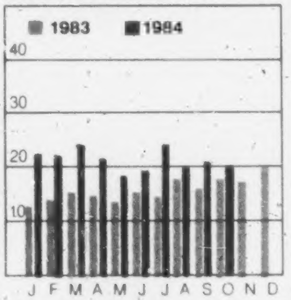


Delivery performance

Percent reporting deliveries

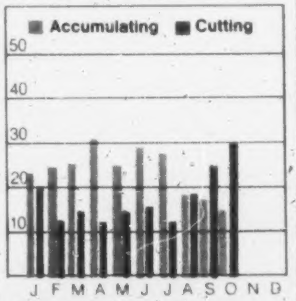


Forward commitments



Inventory strategy

Percent of respondents



Source: NAPM

PROCUREMENT STATUS

Overall climate looks good on PW's exclusive barometer

The overall procurement climate is beginning to look better and better.

True, a few items have continued to stretch out over the last month. But this has been more than offset by shrinking leads.

And it's beginning to show up in *PW*'s exclusive leadtime barometer. This key yardstick of availability has dropped under the neutral 50 level (albeit to only 49) for the first time since the 1982 recession.

Buyers responding to *PW*'s latest buyer survey attribute all this good news to several factors—including (1) some slowdown in the overall rate of ordering, (2) modest capacity increases in some procurement areas, and (3) improved scheduling due to increased emphasis on just-in-time deliveries.

And the near-term outlook is for more of the same. As one purchasing manager puts it, "If leads didn't stretch out during the busy fall period, they're certainly not going to do so during the next few months."

There's plenty of other evidence to back up this appraisal, too. Thus more buyers responding to the latest NAPM Business Survey Committee noted faster than slower deliveries.

About the only items that buyers report in short supply these days are integrated circuits and the chips used to make them.

Given all the above, it's also clear why buying executives are keeping a closer rein on inventories. During the latest available month, for example, PMs reporting lower stocks outnumbered accumulators by a 2:1 margin (30% lower, 15% higher, with the remaining 55% holding stocks steady).

Forward commitments have also been holding at extremely low levels. Thus only 20% of queried PMs say they are now buying 90 days or more in advance—far fewer than the 51% who are currently committing on a 30-day-or-less cycle.

Leadtimes

Chicago: A mixed picture here. Waits (in weeks) are out for PVC resins (1-9), valves and fittings (2-3), and coated paper (2-4). But these are offset by drops in resistors (8-16), MOSS semiconductors (26-39), integrated circuits (20-52), film laminate (12), galvanized sheet (10-14), and special brass sheet (6-8).

Cleveland: A few scattered changes here. Coming in a bit are maintenance paint (3-4), and cold finish aluminum (12-14). But edging out are corrugated boxes (to 3). Other unchanged leads include alloying materials (on demand), glassine and grease-proof paper (4-5), lumber and plywood (3), plastic shrink film (3), and multiwall paper (8-10).

Los Angeles: Grey iron casting delays have jumped out to 7-8 weeks. Ditto, brass castings (8-10). Little change elsewhere with these typical leads: galvanized steel (8-16), copper fittings (3-5), insulation material (6-8), specialty wire (4-6), pumps (8-10), fasteners (6-8), paint (3-5), custom seals and gaskets (4-6), and semiconductors (12).

BUSINESS DATATRAK

Houston: Electronic components are generally a lot easier—available in only 6-8 weeks now. On the other hand, domestic drilling pipe is substantially tighter (12). Other reported leads (in weeks): MRO items (2-3), forgings (5-7), control valves (9-26), and valves and fittings (0-1).

Philadelphia: Coming into these lower weekly leads are printed circuit boards (12), 6500 series transistors (12-14), large scale ICs (16-18), LTL ICs (16-18), CMOS ICs (22-24), and 8031 microprocessors (in stock). But out are power supplies (16) and hex shape stainless bar (16).

Pittsburgh: Pretty much the status quo here—with these typical weekly leads: paints (4-5), polyethylene (5), PVC (6), lead (2), magnesium (4), manganese (3), nickel (3), hardeners (2), multiwall bags (6), plastic bags (3-4), corrugated and folding boxes (3-4), fiber and steel drums (1), lumber (3-4), and waterproof paper (8).

Leadtimes (in weeks)

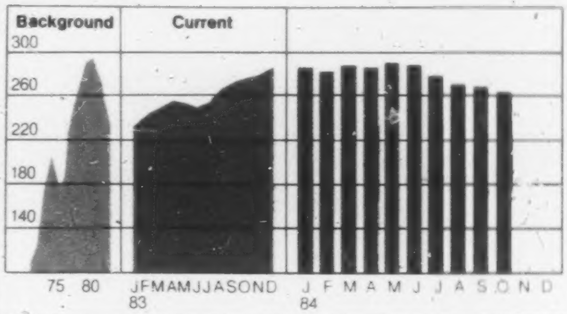
	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	9	9	9
C-R Sheet (Chgo)	5	5	8
Plate (Phil)	10	10	10
Plate (Chgo)	2½	2½	3½
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	7	7	7
H-R Bars (Chgo)	3	3	3
Cold-Drawn Bars (Phil)	7	7	7
Galvanized (LA)	14	14	16
Galvanized (Chgo)	10	11	8
Structurals (Chgo)	4½	4½	3½
Structurals (Hous)	17	17	17
Tubing (Phil)	7	7	7
Grey Iron Castings (LA)	7½	5	9
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	6	6	6
Pipe, Carbon (Hous)	13	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	17	17	17
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	7	7	13
ICs (Linear) (Phil)	17	20	20
Motors (Phil)	15	15	15
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	10	20	17
Relays (Chgo)	15	15	15
Resistors (Chgo)	12	14	14
Resistors, Wirebound (Phil)	10	10	10
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	2	2	1½
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	⅛	⅛	⅛
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Napthalene (Chgo)	2	2	2
Paint (LA)	5	5	5
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	3½	4	3
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	3	3	3
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	2½	1	3
PVC Resin (Pgh)	6	6	6
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	3	2½	3
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	4	4	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	[illegible]	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	11	11	15
Aluminum Plate (Chgo)	14	14	14
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	11	11	15
Brass Castings (LA)	9	7	7
Brass Rods (Chgo)	6	6	5½
Brass Sheet (Chgo)	7	9	17
Brass Tube (Chgo)	5	5	9
Copper Fittings (LA)	3½	3½	3½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	5½	5½	5½
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	4	4	4
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	5	5	8
Zinc (Pgh)	2	2	6
MISCELLANEOUS			
Bearings, Domestic (Phil)	22	22	22
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	50	50	48
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	1½	1½	1½
Fasteners (LA)	7	7	7
Fasteners, Std. (Phil)	4	4	2½
Heat Exchangers, Carbon-alloy Steel (Hous)	20	20	20
Heat Exchangers, Hi-pressure (Hous)	35	35	43
Insulation Mat'l. (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	2½	2½	2
Pumps (Hous)	35	35	35
Pumps (LA)	9	9	9
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	17	17	17
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Index: 1967 = 100

Latest month	**266.4**
Month before	**274.0**
Year ago	**273.4**



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	347.00
Steel, structural shapes, Pitts., cwt	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt	25.10	24.40	24.40
Steel, bars, dlvd. Phila., cwt, merchant quality	23.95	23.95	17.50
Steel, bars, Pitts., cwt	23.95	23.95	17.50
Steel, bars, C.R., Pitts., cwt	29.25	29.25	26.00
Steel, plates, Pitts., cwt	23.25	23.25	25.75
Steel, plates, H.R., Pitts., cwt	23.25	23.25	25.75
Steel, sheets, C.R., Detroit, cwt	27.10	27.10	26.15
Steel, strip, C.R., Chi., cwt	35.30	35.30	35.30
Steel, basic wire, Pitts., cwt	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.555	0.485	0.740
Antimony, in alloy, lb	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb	5.20	5.20	4.95
Brass, red, 85%, [sheet], lb	1.28	1.24	1.19
Brass, yellow, [sheet], lb	1.23	1.19	1.14
Cadmium, ton lots, lb	1.55	1.55	1.25
Copper, electrolytic, wire bars, refd., lb	0.66	0.62	0.68
Copper sheet, over 24 in., lb	1.37	1.33	1.28
Lead, common, N.Y., lb	0.25	0.22	0.25
Magnesium, pig ingot, [99.8%], lb	1.48	1.48	1.38
Mercury, 20 fl. lots, N.Y., fl	328.00	322.00	345.00
Molybdenum Climax Oxide/bags, lb,	4.65	4.65	4.65
Nickel, electrolytic, producer, lb	3.20	3.20	3.20
Platinum, producer, oz	475.00	475.00	475.00
Silver, N.Y., oz	7.80	7.14	8.92
Tin, Straights, N.Y., lb	6.14	6.05	6.52
Zinc, Prime West, East St. Louis, lb	0.45	0.45	0.49
Zinc, die casting alloy, No. 3, lb	0.515	0.515	0.555
PAPER			
Uncoated book #3 offset, ton	850.00	850.00	760.00
Watermarked bond, ton	985.00	985.00	915.00
Gummed sealing tape, carton	16.25	16.10	15.45
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	495.00	495.00	475.00
Wrapping paper, std. distributor cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	350.00	350.00	290.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd	0.399	0.380	0.289
Cotton drill, 1.85, 59", 68x49, N.Y., yd	1.04	1.04	1.02
Cotton middling, 1", N.Y., lb	0.588	0.595	0.731
Printcloth, 48", 80x80, N.Y., spot, yd	0.800	0.790	0.855
Army duck, 37", 13 oz., yd	1.78	1.78	1.69
Blended printcloth, 64", 78x54, yd	0.77	0.77	0.74
20s combed yarns	2.12	2.10	2.10
Wool tops, N.Y., lb	3.60	3.60	3.60

	Latest price	Previous month	Year ago
CHEMICALS			
Acrylonitrile, tanks, lb	0.455	0.455	0.430
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	150.00
Benzene, petroleum, tanks, Houston, gal	1.16	1.18	1.47
Caustic soda, 76% solid, drums, carlots, cwt	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb	0.58	0.58	0.58
Formaldehyde, USP, 37% [12% to 15% meth.], tanks, lb	0.106	0.106	0.106
Glycerine, synthetic, tanks, lb	0.81	0.81	0.73
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.54	0.54	0.45
Naphthalene, crude, tanks, lb	0.22	0.22	0.22
Phthalic anhydride, tanks, lb	0.305	0.305	0.305
Polyethylene resin, low density liner film grade (market price), lb	0.29	0.35	0.38
Polypropylene, homopolymer grade (market price), lb	0.38	0.39	0.38
Polystyrene, general purpose grade (market price) lb	0.37	0.39	0.37
Shellac, bone dry, N.Y., lb	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb	0.35	0.35	0.35
Sulphur, crude, ex-terminal, Tampa, Fla., lt	147.50	147.50	132.50
Sulphuric acid, 66%, commercial tanks, ton	56.85	56.85	56.35
Titanium dioxide, anatase, reg., carlots lb	0.69	0.69	0.69
Xylene tanks, gal	1.25	1.25	1.33
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	306.85	311.95	327.35
Lumber, 2x2, pine, mbf, cl	292.50	293.25	324.70
Plywood, plyform, ¾", msf, cl	575.00	576.75	551.35
Plywood, ⅜", msf, cl	381.35	384.45	366.45
Cement, bulk, ton, tl	63.74	63.75	61.88
Sand, ton, cl	6.22	6.20	5.99
Ready-mix concrete, 3,000 psi/cu yd., 15 cu. yd.	47.62	46.84	45.64
Crushed stone, 1½", ton, cl	7.44	7.43	8.01
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.78	0.78	0,76
Gypsum sheathing, ½"x1'x8", msf, tl	208.77	207.22	172.93
Brick, common, per thousand, tl	175.63	174.38	174.35
Asphalt paving, AC-20	171.03	169.92	158.71
Concrete sewer pipe, 12", prem. joint, per foot, cl	7.11	7.08	6.80
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf, bbl	26.25	26.50	25.25
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	30.50	31.00	30.50
Gasoline, 91 oct., reg., Los Angeles, rack, gal	0.805	0.810	0.780
Gasoline, 94 oct., reg., Chi., tank car, gal	0.770	0.803	0.833
Heating oil, No. 2, Chi., bulk, gal	0.800	0.820	0.828
Heating oil, No. 2, N.Y., bulk, gal	0.808	0.808	0.848
Heavy fuel, PS 400, Los Angeles, rack, bbl	26.50	26.50	26.25
Jet kerosene, gal	0.760	0.785	0.815
LP-Gas, propane, Okla., tank cars, gal [incl. discount]	0.42	0.42	0.49
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	81.00	89.00	85.00
Steel, No. 1, hvy., dlvd., Chi., ton	82.00	80.00	77.00
Copper, No. 1, East, wholesale buy, dlvd., lb	0.560	0.515	0.575
Copper, No. 2, East, wholesale buy	0.465	0.425	0.475
Brass, red, East, wholesale buy, dlvd., lb	0.520	0.475	0.535
Brass, yellow, East, wholesale buy, dlvd., lb	0.335	0.350	0.330
Alum., old sheet/cast, E., wholesale buy, dlvd., lb	0.325	0.305	0.450
Alum., mixed clip., E., wholesale buy, dlvd., lb	0.345	0.325	0.475
Zinc, old, East, wholesale buy, dlvd., lb	0.20	0.20	0.19
Lead, clean solids, East, wholesale buy, dlvd., lb	0.13	0.11	0.14
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	24.00	28.00	25.00
Paper, old corrug. box, dlr., N.Y., ton	15.00	23.00	20.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb	0.12	0.12	0.10
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb	0.37	0.37	0.33

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

Survey of the month

No sweat on the industrial price front

It is looking like a stable year ahead for industrial prices, say the hundreds of buying executives responding to ***PurchasingWorld's*** just-completed nationwide price outlook survey.

Despite the likelihood of a third year of general economic gains, the nation's top PMs are predicting only about 4% average inflation rate on the products and services they buy—only one point above this year's estimated advance.

The reasons given for this optimism are the same as those noted in other recent ***PW*** surveys: (1) still-ample capacity, (2) intensifying foreign competition aided by the strong U.S. dollar, (3) relatively restrained labor, energy, and other cost pressures, and (4) determination on the part of these buyers to hold the line wherever possible.

As one Midwestern purchasing vice president puts it: "We've got the bargaining leverage. With most vendors solidly in the black, there is little reason why we should not hang tough when confronted with any new price increase."

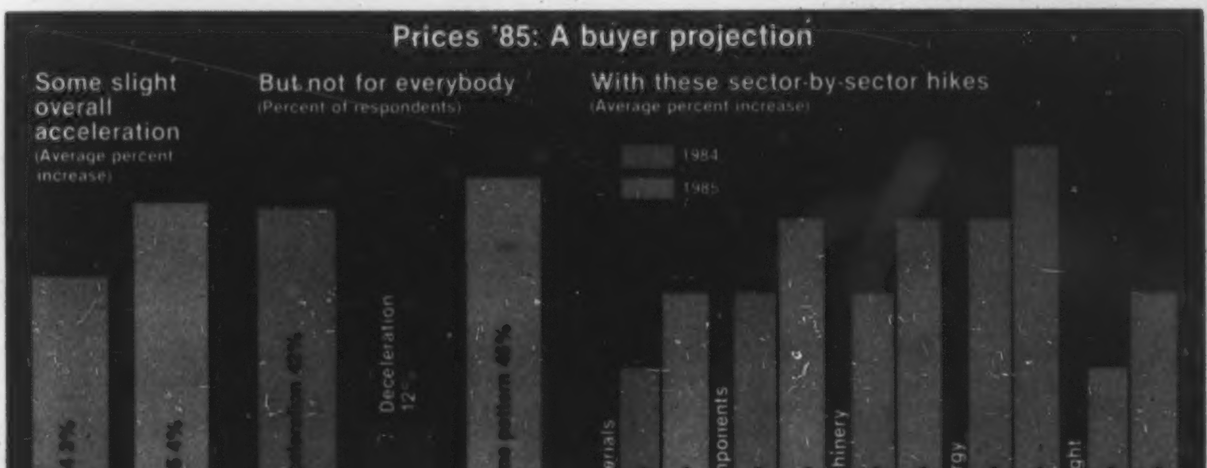
Some of the more specific findings of this latest ***PW*** survey:

- ***Recent performance:*** Over the past year, raw material and freight costs have gone up the least on average (about 2%), followed in ascending order by component parts (3%), machinery (3%), and energy (4%). As to freight, a surprising 29% of those surveyed said they were able to reduce overall costs during the past year.
- ***Next year's outlook:*** On average, each of the sector increases noted above will accelerate by about one percent, bringing projected increases over the next 12 months to the following levels: raw materials (3%), freight (3%), component parts (4%), machinery (4%), and energy (5%).
- ***Price spreads:*** There's much agreement here—with no one seeing any return to double-digit rates in any area. Indeed, the preponderance of anticipated price increases in all five product and service categories are centered in the relatively narrow 2-5% range.
- ***Currently soft areas:*** The list is still impressive and includes steel, aluminum, fasteners, zinc, copper, textiles, plastic resins, petrochemicals, machine tools, electrical supplies, petroleum products, and natural gas.
- ***Best candidates for holding the price line:*** Among products noted are steel, aluminum, copper-base alloys, electric motors and components, fasteners, stampings, machined parts, coal, electronic components, tires, diesel engines, and office supplies.
- ***Candidates for bigger-than-average price boosts:*** The list here covers fabricated metal parts, chemicals, plastic resins, corrugated boxes, other paper packaging, energy, steel (if quotas work), office furniture, capital goods, electric components, and military electronics.

Whatever the specific products or services involved, PMs say they will do their best to keep price increases within bounds. To achieve this, they will be (1) stressing new sources including imports, (2) questioning all major increases, (3) working with vendors to keep costs down, and (4) placing more long-term contracts and multi-plant supply agreements.

A few also expect some aid from a slower rate of general business growth. With real GNP slated to advance only 3% in 1985 (vs some 7% this year), many PMs feel their bargaining positions won't deteriorate—and may even improve a bit.

As one New England PM sums it up: "Our master plan calls for about the same rate of increase as during the current year. True, we may have to move this up a percentage point or so, but we could also end up even better than last year if the current boom runs out of steam. More succinctly, our inflation range is 3-5%—and there had better be a darn good reason for us to top this in any major procurement area." **PW**



Source: PurchasingWorld

Quarterly freight report

Rate hike projections toned down

Some good news on the freight front: Rate hikes may be slightly under levels projected just three months ago.

At least that's how transportation analysts at Wharton Econometric Associates see it. The average overall increase for 1985 is now being projected at only 6.0%—down a full percentage point from projections made at summer's end. And the figure is off even more from this past spring when Wharton was talking about a big 8% advance.

1986 projections have also been toned down from 4.9% predicted three months ago to only 4.0% at latest report.

Why the more optimistic rate outlook? Much of it, say Wharton analysts who track the industry closely, can be traced to reduced energy cost pressures—with an added assist coming from lower-than-anticipated labor and other cost increases.

And what is true for overall freight rates also seems to be holding for each of the key transportation modes. Thus current projections for rail, truck, barge, and air are all under previously anticipated levels—despite continuing demand gains. Here's a more detailed look at each of these modes:

Rail: Carriers have benefitted from increasing economic activity this year as well as from the still-growing popularity of piggy-back traffic which is up a hefty 18% so far this year. This is well above the overall rail advance which is put near 13%.

The industry did show hefty increases of 16.1% and 8.7% (seasonally adjusted annual rates) in the first two quarters of 1984, but advances should cool down considerably (to 3-4%) during the last half of this year. Increases for the year as a whole should average about 6.8%.

Next year, quarterly rate increases should build up to 6.5% by the third quarter. The average boost should be about 5.4% in 1985 and an even smaller 4.0% gain for 1986.

Trucking: Class I carrier tonnage continues to run well ahead of last year—with as much as an 8% gain seen for the current year. Also, LTL shipments are growing faster than TL shipments, reflecting the growing popularity of just-in-time inventory management systems.

Rates have risen consistently with economic activity—showing an 8.3% increase over the first half of this year. But hikes should cool off somewhat at the end of the current year—and the rise for all of 1984 should average around 6.6%. In 1985 rates should advance to about 6.4%, and by 1986 the increase will only be in the 4% range.

A new Booz, Allen & Hamilton study suggests structural changes within the industry over the next five years. Specifically, traffic hauled by contract carriers will increase sharply (about 18% per year) between now and 1988—with much of this increase coming from shippers presently operating their own private fleets.

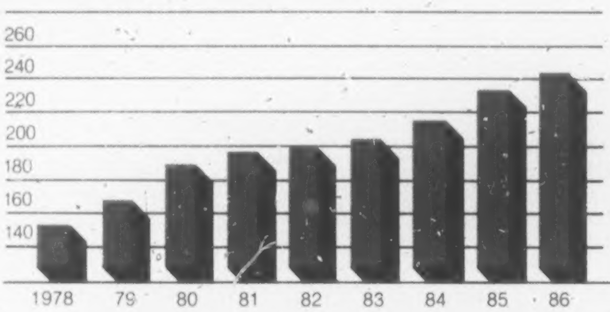
Air: As freight traffic rises (this year it has been running some 16% ahead of 1983 levels), upward pressure on prices builds. Upshot: Rate hikes should grow from 4.2% this year to 5.5% in 1985. But the upward thrust should begin to abate a bit in 1986 as economic activity slows down—the overall rate hike for 1986 is put at only 4.4%.

Barge: This sector will continue to show the smallest rate increases—only 5.2% next year and 3.5% in 1986. The reason: Continuing overcapacity and cut-throat intra-industry competition despite the fact that tonnage will be up as much as 10% this year.

Other developments worth noting: 1) CSX Corporation's acquisition of American Commercial Barge Lines—signaling rail's entry into barging, 2) a scheduled 2¢/gallon increase in the fuel surcharge assessed against barge operators, and 3) a proposed user fee to pay for inland waterway projects. ***PW***

PurchasingWorld freight rate index

Index: 1972 = 100

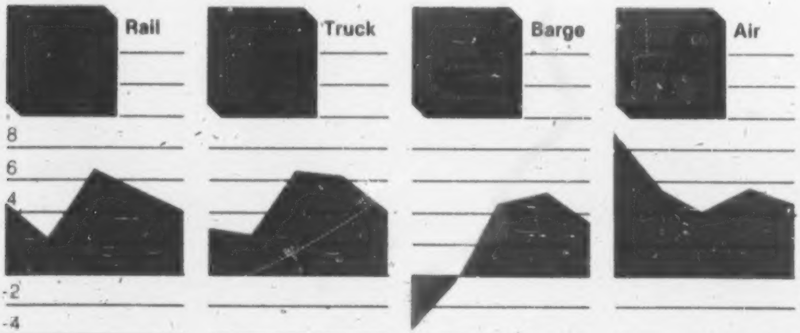


Increase over previous year	
1978	7.9%
1979	9.4%
1980	12.7%
1981	7.6%
1982	1.5%
1983	2.2%
1984	6.3%
1985	6.0%*
1986	4.0%*

* Estimated

Freight cost outlook by mode

Percent increase over previous year



Source: Wharton Econometric Forecasts

Buyers still calling shots in plastics industry

Thermoplastic resin buyers are still calling most of the shots. Despite continuing good demand—up an estimated 5-6% this year on top of last year's big 12.5% increase—availability is not a problem and tags have been edging lower recently.

Today's huge discounts tell the price story. Price shading has always been endemic in this hotly competitive sector; but some of the big price breaks currently available are really eye-openers. A spot check of volume purchases today reveals these whopping discounts: liner grade low density polyethylene (35%), injection molding high-density polyethylene (40%), homopolymer polypropylene (16%), general crystal polystyrene (21%), general purpose polyvinyl chloride (45%), and pipe grade ABS (17%).

Where do we go from here? While some modest price increases may be in order for 1985 as producers trim inventories, they probably won't exceed 4% or so on average. Reasons: 1) the cost of the petrochemical raw materials remains at or near current bargain-basement levels, and 2) excess capacity continues to plague producers.

This year the industry will reach only 78% of its potential. And most of the projected demand gain is being offset by new potential coming on stream (about 4.5% on average).

No big changes are seen for 1985. Capacity increases will dwindle to around 2% and demand advances will also be harder to come by—about 3-4%. Conclusion: The overall plastic resin operating rate probably won't top the 80% mark anytime soon.

Import competition has become a problem for the entire plastics industry. The strong dollar and increased foreign capacity have slowed exports and increased the flow of foreign goods to the U.S. Incoming PVC shipments, for example, may exceed 400 million lb this year—double the 1983 volume.

Foreign trade could become an even bigger headache in the years ahead as more and more foreign plants (often offering state-subsidized, lower priced goods) begin to appear.

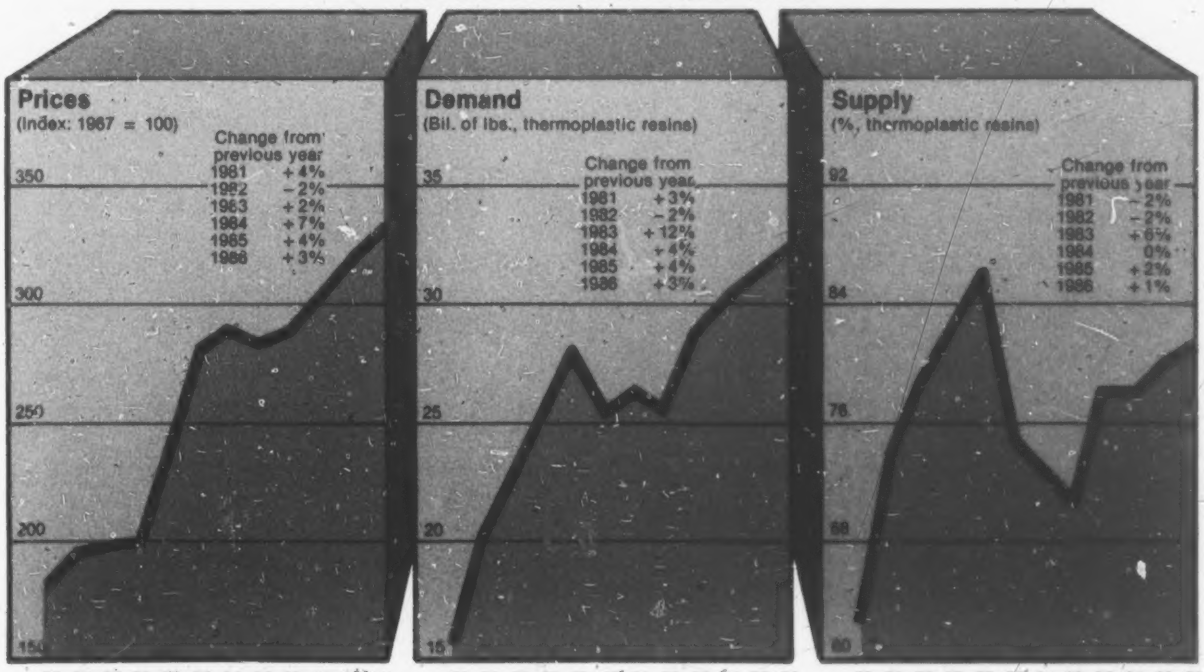
But the plastics industry as a whole will also have to wrestle with the fact that the big growth rates of the past few decades are over. Most industry analysts are only projecting 4-6% annual increases through 1990.

There are exceptions—The so-called engineering resins which can be substituted for metal and other materials can probably expect faster growth. (For more on the potential of engineering plastic, see the following pages.)

On the automotive front the potential is even greater—today's car includes about 161 lb of plastics but this figure could rise to over 180 lb within a decade.

In short, the plastics demand picture is still a rosy one. From a buyer's viewpoint there's an added plus—economy—as new formulations, improved production techniques, the outlook for continued low feedstock costs, and competition all help to keep prices at very attractive levels. **PW**

Plastic resin trends into 1986



Source: Bureau of Labor Statistics, Society for the Plastics Industries, PW Estimates

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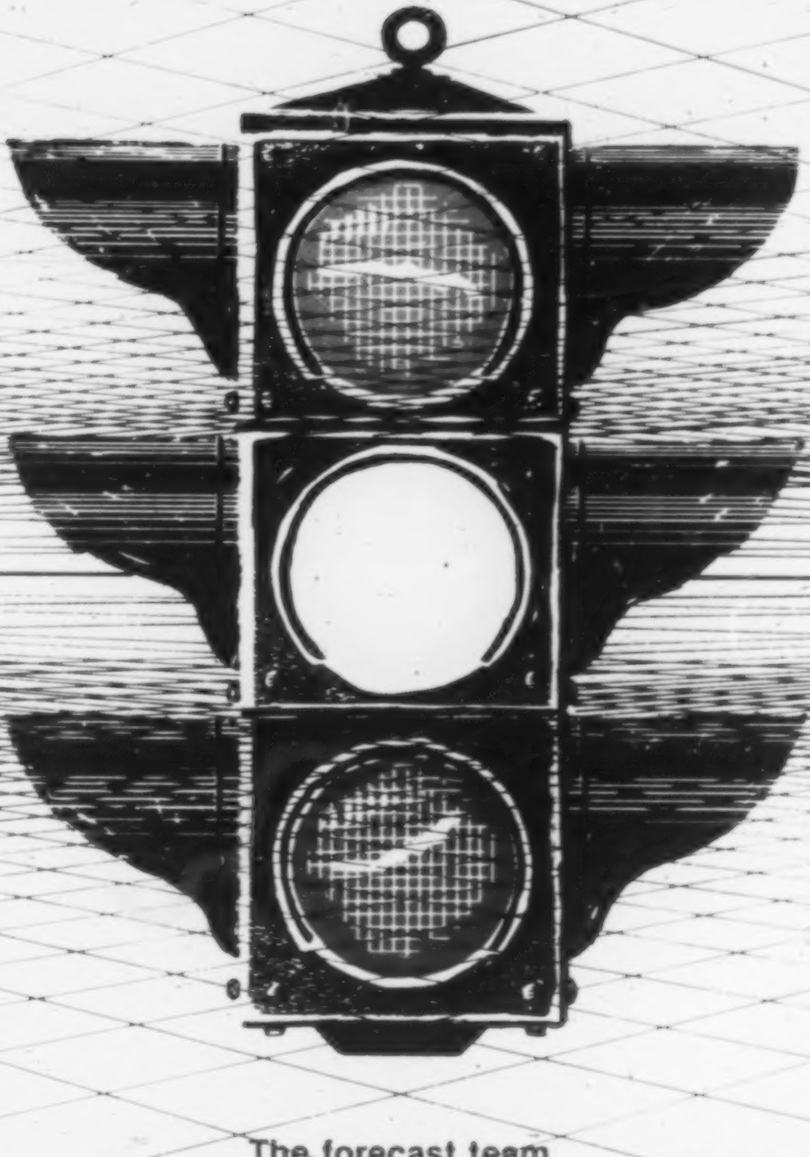
Purchasing World

PW calls signals on '85 economy



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The forecast team

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PARADISO

Plus

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PurchasingWorld

Helping you manage the business of buying

Vol. 29 No. 1-January 1985

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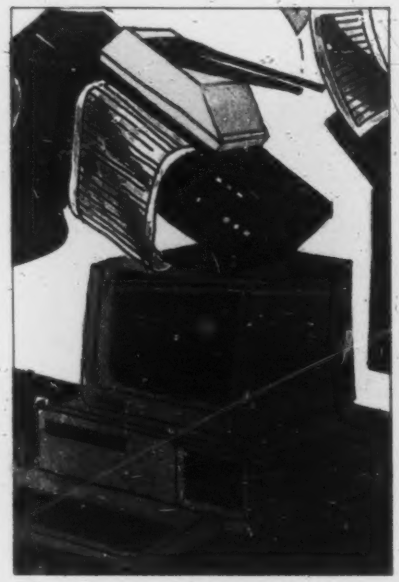

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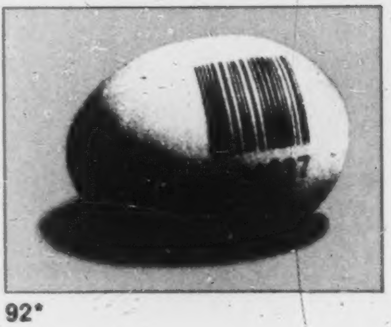

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PW PREDICTS

Robert S. Reichard, executive editor

Third year is a charm in price outlook

It almost seems too good to be true. But all signs point to a third straight year of relatively small price advances—with maybe even a few declines thrown in for good measure.

That is not only our projection, but also that of the many experts queried in this special "Forecast '85" issue. It is hard to refute the rosy picture they paint—especially when it comes from such diverse sources as:

- **Industrial purchasing managers:** Buyers responding to a special *PW* survey put the average 1985 price increase at only 4.5%. And the prestigious NAPM Business Survey Committee, which takes a more qualitative approach, finds that nearly half its members (46%) feel they will be able to hold the price line or actually effect scattered price declines over the next six months.

- **Top management:** The average increase projected by executives is put at 4%—though some modest industry-by-industry variation is expected. Then, too, there is not one single industry that forecasts anything larger than a 6% boost for the upcoming year.
- **Business economists:** *PW*'s own Dr. Louis J. Paradiso looks at prices from three separate vantage points—the GNP deflator, producer finished goods prices, and the cost-of-living index—and comes up with 1985 increases of only 3.6%, 2.5%, and 4.5%.
- **Econometric models:** Surprising agreement is also noted among the four big models surveyed—with the average 1985 increases anticipated: GNP deflator (4.3%), finished producer goods prices (3.1%), and the cost-of-living-index (4.2%).

There is no one big reason for all this optimism. Instead it can all be traced back to a combination of many factors:

- **Still ample supplies**—Paradiso, for example, sees only an 82% overall factory operating rate for the next 12 months. That is still under the 85% level generally regarded as the cut-off point between a buyers' and a sellers' market.
- **Relatively restrained unit labor cost increases**—probably something in the order of only 2-3% for the overall nonfarm economy.
- **The absence of energy pressures**—some analysts feel oil could actually decline if recently reduced OPEC production quotas are exceeded.
- **A continuing strong dollar**—not only making imports cheaper, but putting pressure on domestic producers to hold the price line.
- **Bumper food crops**—big enough to keep supermarket tags from rising more than 3-5% in 1985.
- **High interest rates**—The 11% and higher prime rate envisioned for 1985 should discourage excess buying on the part of both businessmen and consumers.
- **The absence of inflationary psychology**—something which in the past has led to anticipatory price increases and the willingness by buyers to accept them.

Energy price trends

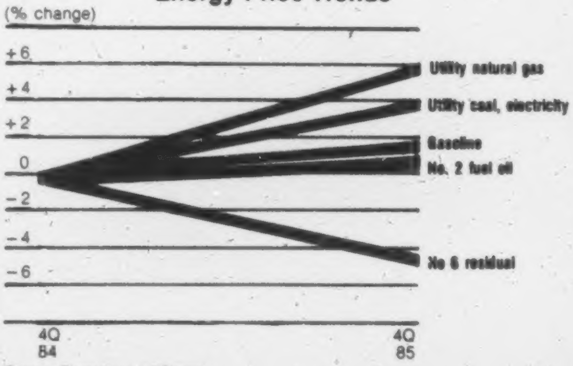
More good news on the energy front.

This time it is from the Department of Energy which periodically projects near-term fuel prices. The agency's latest overall appraisal: stable to only slightly higher average quotes through 1985

That is not to say, however, that individual sectors will all remain unchanged. But small increases in some areas will be offset by stable or lower readings in others.

Make the assumption that imported crude oil will remain at $29/bbl and the situation is expected to shape up like this:

- **Gasoline:** Pump prices will continue to average in the $1.20 range—though some seasonal swings are likely.
- **Heating oil:** Only about a 1¢/gallon boost is seen during the first quarter—much less than a year ago when cold weather forced a big 7¢/gallon jump.
- **Residual oil:** Displacement by coal and nuclear power (forcing as much as a 6% drop in demand in 1985) could bring prices down about 4.5% in 1985
- **Natural gas:** Partial decontrol will make for some upward pressure on the wellhead level, the overall advance through fourth quarter 1985 may only be in the 6% range.
- **Electricity:** Average boosts through the end of the year will come to only about 4%—well under 1984 gains. One reason: Interest rates and the cost of capital to electric utilities are heading lower.



Energy Price Trends

Source: Department of Energy

PW PREDICTS

Textiles

CURRENT SITUATION: It's been a rather bearish year for this industry—at latest report, production is running close to 7% below year-earlier highs. And an even sharper decline of 15% is noted for carpeting. **Prices aren't all that firm either—recent softness is reported both in the fiber and fabric sectors of the market.** Behind this lackluster performance: skyrocketing imports (up some 40% in 1984) and recent consumer caution.

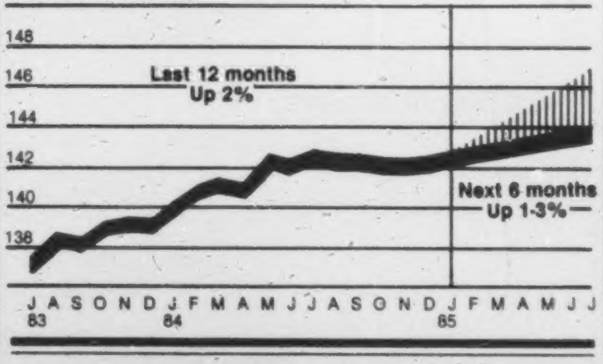
DEMAND: No dramatic turnaround seems even remotely possible. The recent tightening of import restrictions will be of some help but this will take some time. **The economic slowdown is having a negative impact on the textile industry**—one econometric model is calling for only about a 2% increase in demand. An even more bearish report comes from within the industry—**A recent survey of textile executives suggests less than a .5% gain in real sales for 1985.**

SUPPLY: Falling operating rates attest to the basically oversupplied situation. At latest report, the average domestic facility was operating at 83% of its potential—far under the 90%-plus reading of one year ago. Foreign supply is also ample. **The situation in basic fibers also suggests few problems.** And the 1984 cotton crop is estimated at 3.3 million bales—up 70% from 1983. The current 82% operating rate in manmades is expected to remain unchanged in 1985.

PRICE OUTLOOK: Recent softness shows every sign of spilling over into 1985. Polyester staple quotes are now in the 76¢/lb range—off 2¢/lb from a year ago. And raw cotton remains in the low 60¢ range—more than 10¢/lb under a year ago. Some fashion fabrics may inch up but such hikes will be exceptions rather than the rule. Result: **Overall textile prices may rack up a 2-3% gain in 1985.** And even this depends on continued GNP gains and on import curbs.

Textile mill product prices

(Index: Dec. '75 = 100)



Computers

Over the next 6-12 months you will be seeing home computers with higher tags—generally in the $1,000 range (far higher than the $100-$200 models that have dominated the market so far, but well under the $2,000-$5,000 PCs aimed at the business market. More important, the extra money will buy a lot more sophistication and power. These machines will have more powerful microprocessors and larger memories with disc drives and high-resolution monitors that can display sophisticated graphics.

Paper

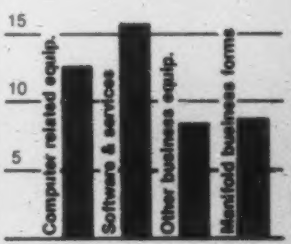
Discounting is cropping up in several key grades (notably uncoated white paper) except linerboard and market pulp. The threat of new capacity is also putting downward pressure on tissues—with shading reported in both the consumer and industrial sectors of this latter market. Preliminary estimates suggest only moderate shipment gains in the key corrugated box area—only about 3.5% in 1985 to 284 billion square feet—in sharp contrast to the big 8%-plus advance racked up in 1984.

Business equipment and supplies

Another good year looms ahead, with industry revenues expected to jump at a 12.4% rate in 1985—bringing total sales to near $173 billion. Since prices do not seem to be climbing significantly, the real volume gain is likely to be almost as large. Some of the 1985 increases projected for key segments of the industry (as estimated by the Computer and Business Equipment Manufacturers Association): computers and related equipment which account for three of every five dollars spent (12.4%), software services (15.5%), other business equipment (8.2%), and manifold business forms (8.5%).

Business equipment & supplies

(% change in '85 sales)



Source: Computer & Business Equipment Manufactures Assoc.

Semiconductors

Toned down computer sales estimates are causing reduced demand and falling prices. On the demand front, all signs now point to only a 7-15% increase in chip orders—down sharply from the almost 50% boost of 1984. Couple this with increased capacity (the 1984 addition equalled that of 1982 and 1983 combined)—and it spells price softness. Thus the popular 64K random access memory (RAM) chip has been virtually halved, falling to near $1.85. And the new 256K

PW PREDICTS

Aluminum

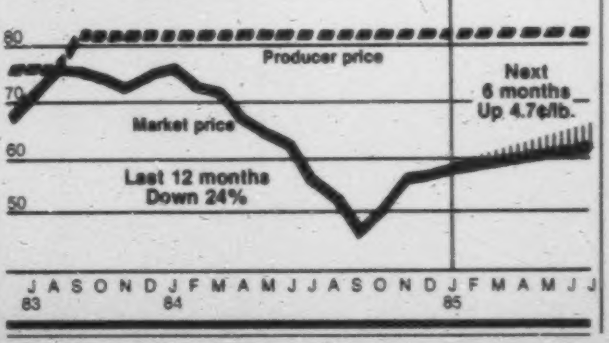
CURRENT SITUATION: Markets are still somewhat shaky. Merchant ingot is up a bit from the under 50¢/lb levels of late summer. But there is softness in the fabricated area where producers have been offering as many as six 5% discounts on common alloy sheet. On a more bullish note, production cutbacks are beginning to correct a big inventory imbalance—**though stocks still remain well above normal levels.**

DEMAND: Orders picked up a bit during the fall months—thus helping to push total domestic 1984 shipments up some 3-4% (to near 15 billion lb). Next year's gains should also be quite modest (maybe 1-4%). In the long run, **don't expect any more than 3-4% advance for the rest of the decade.**

SUPPLY: Shorter leadtimes and high producer inventories would seem to suggest clear sailing. Global holdings are estimated to be running better than 20% above year-earlier levels. Recent production cutbacks should bring these levels down a bit after mid-1985. **But there is plenty of excess capacity should demand suddenly spurt.** Imports have been adding substantial tonnages to domestic supply and the growth in recycled metal has reduced demand for primary material by about 1 million metric tons.

PRICE OUTLOOK: Some increases would seem to be inevitable—given recent production cutbacks and the modest demand gains envisioned for 1985. But the precise timing is uncertain—though an ingot move into the 65¢/lb range with commensurate increases in the fabricated lines can't be ruled out by late spring or early summer. Also suggesting higher prices are production costs which here in the U.S. are estimated at near 60¢/lb. **On the other hand, there is little to suggest any near-term bounceback to the 75¢/lb peak of last winter.** It could be well into 1986 before this level can be reattained.

Aluminum ingot price
(Cents per pound)



chip could be down to about $10 by next fall. A similar situation is shaping up in transistor-transistor logic (TTL) devices where prices have slipped 30-40% from last year's highs.

Cellular phones

Prices are tumbling. The basic unit which commanded an average quote of near $2,500 last summer now fetches only about $1,500. And further declines seem all but certain—as Tandy will soon come out with a new $1,000 model. Some lease agreements are also available—for as low as $99/month which includes about an hour's worth of peak time calls and the option to buy the unit after three years.

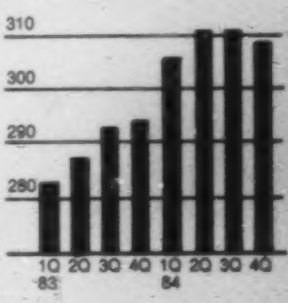
Lead

An improving labor situation (some big domestic strikes have been settled) is making for sharply lower prices. The current low-to-mid 20¢ range, for example, represents as much as a 5¢/lb decline from recent fall highs. But don't expect prices to fall out of bed—especially if winter is colder than normal (which could hype the demand for car batteries).

Plastic resins

Another moderately good year looms ahead. The industry, for example, is now betting on about 6% real growth for the new year—close to 1984's big 7% jump to 44.3 billion lb and double the anticipated GNP growth rate. Prices have stabilized after recent declines—with even a few cents being added to off-list quotes of both PVC and ABS pipe-grade resins over the last month or two. Some further modest recovery in overall plastic price average is anticipated for 1985—with the 12-month increases averaging out somewhere in the relatively low 3-4% range.

Plastic resin prices
(Index: 1967 = 100)



Farm equipment

Discounting is rampant—as producers move to pare top-heavy inventories. Some discontinued tractor models, for example, could soon sell for as little as 40-50% of their list value. Average tractor quotes have already dropped sharply—from their regular $85,000 list to only $50,000. And even more precipitous declines are noted in combines where models designed to sell for $180,000 now go for less than $100,000. The big problem is overcapacity—with both tractor and combine output averaging under 30% of industrial potential.

Paper

Count on fairly adequate paper and paperboard supplies—through 1985 and probably into the 1986-87 period as well.

Increases in domestic mill capacity over this time span will be quite modest—1.2%, 1.7%, and 1.7%, respectively. But demand, too, won't be all that ebullient.

Thus, Norma Pace, senior vice president of the American Paper Institute (API) sees paper buying following the GNP trend on 1:1 basis. If you accept her 3.5% GNP advance, then paper should be up the same amount in 1985. The implication is operating rates will rise only another percentage point or so.

Mrs. Pace adds that this kind of increase is feasible—given the industry's past history of always being able to squeeze out a bit more if needed via adjustments and better scheduling. In 1984 , Mrs. Pace notes that these actions allowed the industry to "find" some 700,000 additional tons.

Then there are always imports. There is more than sufficient overseas capacity. And if 1984 is any indication, domestic buyers will be able to fill any holes by going overseas—and at tolerable prices (given the strong dollar).

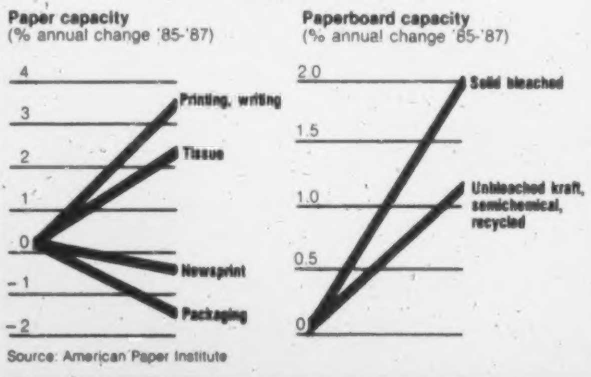
That is not to say that some spotty tightness might not develop in linerboard from time to time. But it will be manageable, according to API executives.

There is not much concern about prices either. The API steers clear of this subject. But if you read between the lines, any increases are likely to be modest.

There is little indication of any significant cost pressures. Thus 4% productivity gains are offsetting most pay cost boosts—and both energy and chemical tags are moving up very slowly.

Not much of a price increase then? A look at econometric models, which factor in both cost and market factors, suggests only about 5-6% advance.

Paper: Enough to go around



Source: American Paper Institute

Zinc

Production cutbacks seem to be bringing the market into somewhat better balance—with U.S. producer stocks slowly being pared. But things are not all that firm—producers continue to shave as much as 2-2.5% off their lists. Demand, on the other hand, remains fairly good—helped by (1) Red Bloc buying, (2) a 4% increase in zinc usage per U.S. car, and (3) rising demand for zinc oxide from the booming tire industry. Upshot: Current prices should hold—with maybe even a small boost if recent production restraints can be maintained.

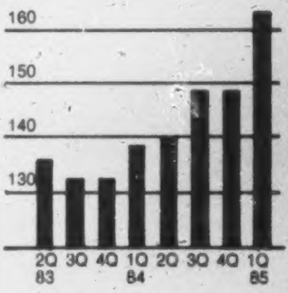
Copper

The recent fall rally seems to have fizzled out—with quotes back in the low 60¢ range (off about 4¢/lb from recent highs). But the prognosis is still moderately bullish. Thus exchange stocks—while still high—have been halved over the past year. And about one million tons of North American capacity have been idled. The substantial 7% increase in 1984 global demand should also help buoy prices. Best bet: an average 1985 quote of about 70¢/lb.

Sulphur

Add another $15/ton to the going price. the bellwether FOB Tampa quote, for example, has just moved up to $162.50/long ton—though TVAs amounting to as much as $10/ton still remain in effect. Blame it all on shrinking world inventories. Saudi Arabian stockpiles have dried up and Canada's holdings are dropping by as much as two million tons per year (to only about 12.5 million tons currently). Moreover, with demand from fertilizers still pulling stocks down, further price hikes seem likely—along with increases in such key derivatives as sulphuric acid.

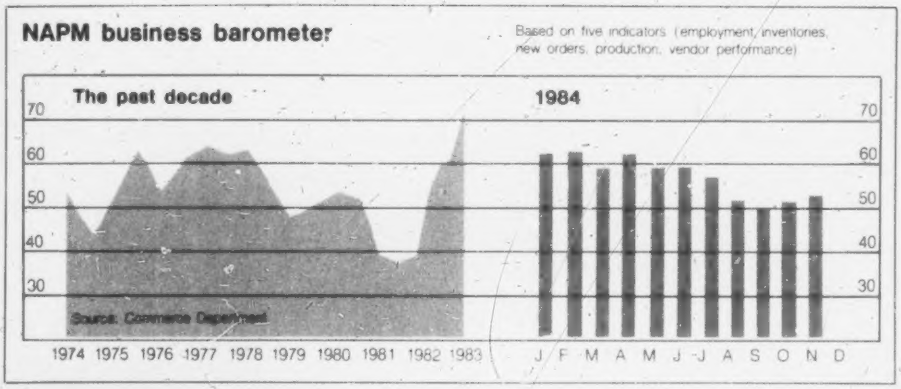
Sulfur
($1 long ton, FOB TAMPA)



Steel

Markets continue to be unstable—with one analyst (Peter Marcus of Paine Webber) estimating that as much as $20/ton was shaved off the average quote during the last six months of 1984. Nor does he expect any dramatic reversal of this trend—at least not over the next few months. His outlook remains bearish for 1985—seeing only about a $15/ton average hike. Holding price increases down will be continuing high imports and not too strong domestic shipments (roughly 77-79 million tons is projected.

BUSINESS DATATRAK


NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance)

Source: Commerce Department

KEY ECONOMIC TRENDS

No big peaks, no deep valleys

Decelerating growth—yes. An actual downturn—no.

That's not only the consensus of all the projections in *PW*'s special "Forecast '85" section in this issue, but also one suggested by taking a more detailed look at some of the sensitive near-term business indicators.

Despite the talk of problems in the months ahead, the NAPM Business Barometer—a yardstick that has consistently called the business turn a few months in advance—actually rose more than a point over the last month (to 50.8). That again puts it above the neutral 50 mark—suggesting expansionary forces are again outweighing those pointing to contraction.

Some of the more specific factors contributing to this encouraging conclusion would have to include (1) recent slippages in interest rates, (2) still low stock-sales ratios—ruling out the possibility of firms living off their inventory fat, and (3) continuing strong government spending increases.

Top corporate executives also seem confident—judging from their new 1985 forecasts. And the same can be said about consumers—with the latest Conference Board optimism index showing a sizable five point rise to 96.1 (1969-70 = 100).

All this is not meant to imply that future economic growth will equal that of late 1983 and early 1984. Reason: There are other indicators—such as capital investment—which suggest a more moderate growth track.

The the Conference Board's latest capital appropriation figures (forerunners of actual spending) now show a fair-sized dip. But the decline is from the exceptionally high levels of the previous quarter (see chart). In any event, the backlog of unspent appropriations continues to grow—suggesting that further capital spending gains are still likely.

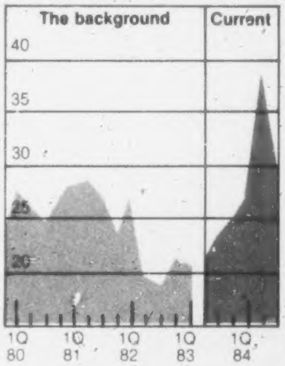
New orders for durable goods are still another barometer pointing to moderate business gains. These incoming bookings are off considerably from recent highs (center chart). But backlogs—a more meaningful indicator of activity over the next few months—remain close to peak levels.

The huge influx of imports also has to be regarded as a restraining force. The Commerce Department, for example, is now predicting about a $150 billion trade deficit for 1985—and this has to have some negative impact on production and GNP.

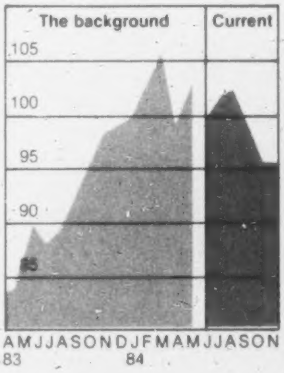
Both plus and minus factors are buffetting the economy, but if there is still any doubt about what it all adds up to, take a look at the current employment picture. The fact that help wanted ads are up (see last chart), would certainly attest to continuing business confidence—for job openings

Leading indicators

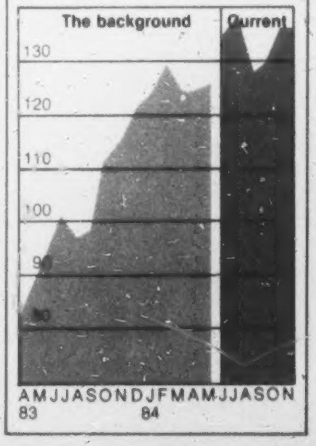
1. Capital appropriation
(Billions $, seas. adj.)



2. Durable goods orders
(Billion $, seas. adj.)



3. Help wanted
(Index: 1967 = 100)



only appear when corporate America is betting on further gains.

Also, the unemployment rate is now only slightly above the 7% level and edging lower. This has to be regarded as a positive sign because it means that consumer incomes will continue to rise over the winter and spring months.

A look at what the big econometric models are predicting best sums up the near-term outlook. They suggest small 2% increases in industrial production at an annual rate through mid-year. While nothing like the big 8% and higher gains of early 1984, they do seem to insure continuing increases for most major industries—with the one exception of housing where high mortgage rates are finally beginning to take their toll.

Operating rates level off

Earlier fears of possible supply tightness have all but disappeared. Given the recent GNP slowdown, it looks like clear sailing—not only for the next 6-12 months but well into 1986.

After climbing steadily through most of 1983 and the first part of 1984, factory operating rates (expressed as a percent of production) have begun to level off—with some fractional declines noted in recent months.

The current level (82%) is also encouraging—traditionally the transition from a buyers' to a sellers' market occurs only at the 85% level. More important, any move to that higher level seems all but impossible today—given forecasts for (1) a continued upcreep in new capacity and (2) only a 2-3% increase in industrial output over the next 12 months.

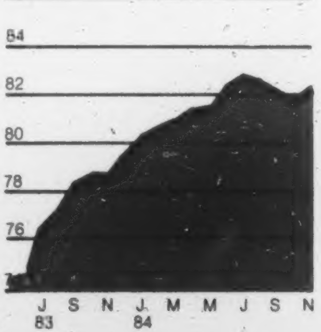
The relative abundance is pretty much spread out among all basic industries and seems to embrace producers at all levels—raw materials, semi-fabricated items, and finished goods. The only problem area seems to be paper, which is now running at near capacity. But it is important to remember that this industry prefers to operate at over 95% and that new capacity projections suggest that there should be enough to go around.

Also worth noting: the low (72.6%) reading in chemicals—an area which also covers plastic resins. This reading suggests not only ample supplies but also continued competitive pressures.

Factory operating rates flatten out

All manufacturing

(% of rated capacity)



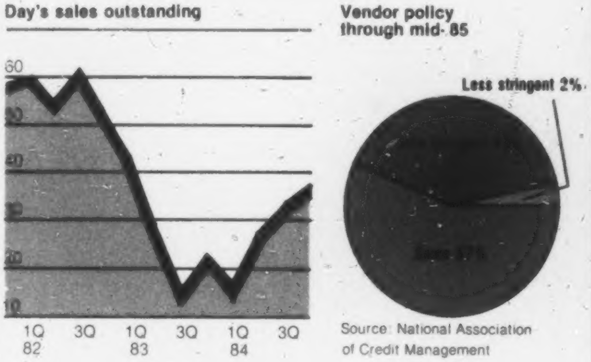
Industry-by-industry

(Current rate %)

Stone, clay, glass	77.3
Steel	66.4
Nonferrous	84.2
Fabric metal products	76.9
Nonelectrical machinery	81.7
Electrical machinery	91.4
Automotive	81.7
Aerospace	77.2
Instruments	81.1
Textile mill products	82.8
Paper & products	97.3
Chemicals	72.6
Petroleum products	79.1
Rubber & plastics	94.5

Source: Federal Reserve Board

Credit trends at a glance



Source: National Association of Credit Management

Turning the screws on credit

More stringent vendor credit policies may soon be in the offing. So say more than two out of every five respondents to the latest quarterly National Association of Credit Managers survey.

That's a hefty 28% increase over the number of NACM members making such a projection just three months earlier. The tightening is expected to take many forms—accelerated collection calls, earlier placing of past due accounts on a C.O.D. basis, filing more liens, placing more accounts for collection with outside collection agencies, and the resistance to pressure from the sales side to improve credit for marginal accounts and for customers with their own cash flow problems.

The major reason for this get-tough approach: a rise in days supply outstanding (DSO). At latest report (fourth quarter 1984) it had reached 37 days. More important, this marks the third straight quarterly rise (see chart alongside).

The current figure is still nothing like the recession readings of 1982 when 50-60 days were the norm. Still, the DSO rating significantly affects bottom line performance since every 30 days extra is the equivalent of a 1% profit drain (given today's 12% interest rates).

Another interesting finding: Despite the projected tightening, most credit managers aren't expecting miracles. When asked to estimate DSO over the next six months, many more saw increases (37%) than decreases (18%).

Given all of the above, it is not surprising that credit managers now deem slow-paying customers as their primary headache—with 96% of the survey respondents currently noting concern.

BUSINESS DATATRAX

CURRENT PRICES

Year ends on good note, 1Q the same

The year has ended on a good note—with little significant change in overall industrial price averages noted over the last 30 days. Add in the good performances of other recent months and the advance over the year just ended now looks to be less than 2%.

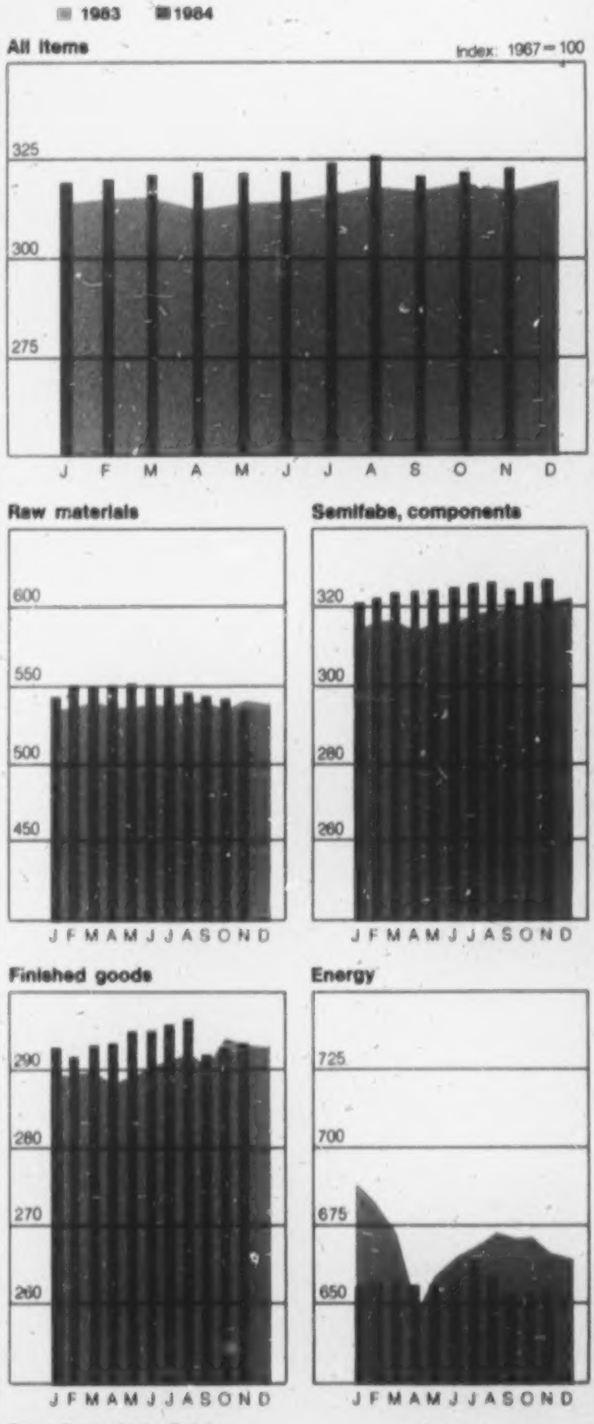
You would have to go back to the pre-OPEC days of the 1960s to top that. And preliminary signs seem to indicate that the first quarter will be almost—if not as good. True, some increases have been announced. But they are not nearly as numerous as might normally be expected at the beginning of a new year.

Another good omen:

This month's breakdown

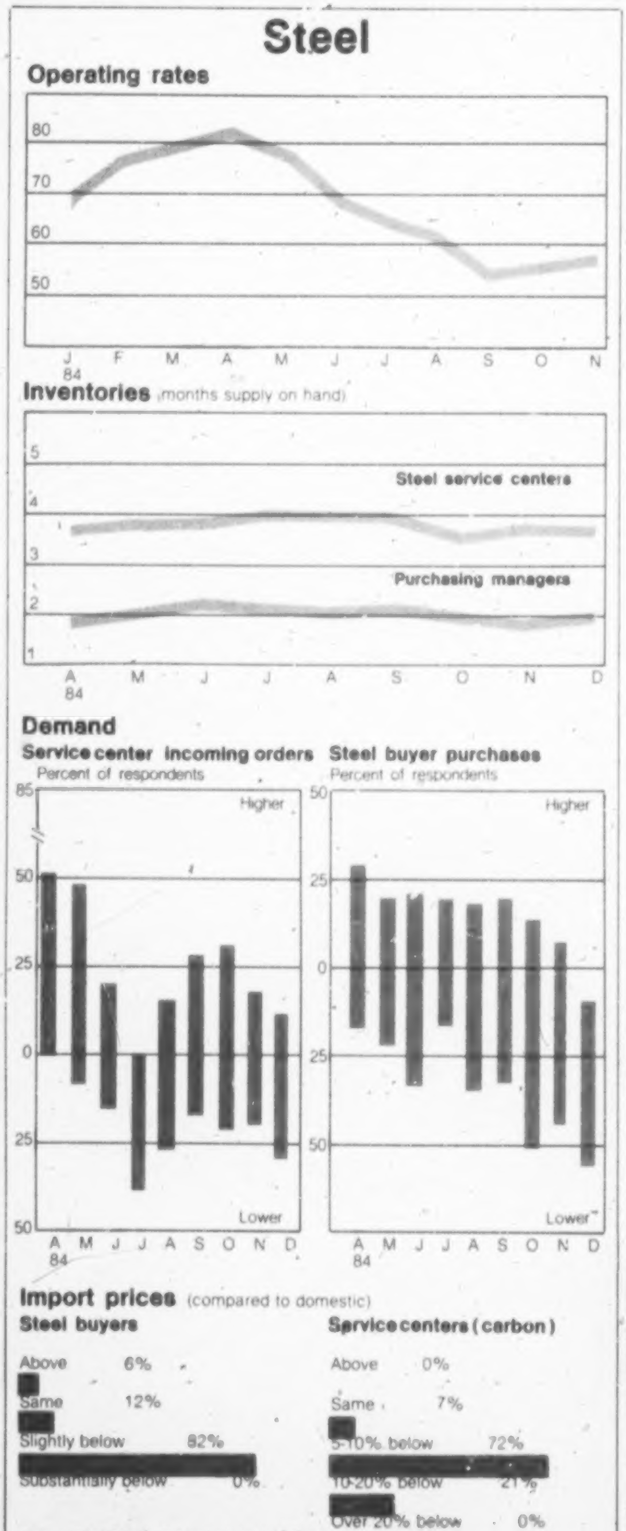
	Latest level (Nov.)	% change from: Month ago	Year ago
Bearings	345.5	0.1	3.4
Bolts, nuts, etc	276.9	−0.2	2.5
Chemicals, inorganic	296.5	−0.3	1.8
Chemicals, organic	351.6	−0.6	−5.7
Concrete products	311.4	0.0	2.4
Corrugated cartons	281.2	2.2	11.7
Cutting tools, small	284.3	0.5	2.2
Electric lamps (bulbs,	340.7	1.4	4.1
Electronic components	196.7	0.5	5.1
Fans and blowers	351.5	0.0	4.5
Foundry and forge products	362.5	−0.2	2.7
Fuel oil (residual)	1131.7	1.7	0.6
Furniture, commercial	301.0	1.0	3.8
Gasoline	564.1	0.6	−5.8
Glass, flat	217.4	−0.3	−5.5
Glass containers	364.9	0.0	4.1
Gypsum products	332.3	−2.1	5.5
Hand tools	364.6	0.1	3.7
Hand tools; power driven	226.4	0.0	2.6
Industrial furnaces	381.8	1.4	3.4
Integrating and measuring instruments	231.0	0.3	3.8
Internal combustion engines	347.7	0.2	3.3
Lubricating oil	794.5	0.0	1.5
Lumber millwork	309.8	1.0	0.6
Material handling equipment	291.4	0.1	1.9
Metal containers	357.5	−0.1	6.7
Metal mill shapes (nonferrous)	317.5	.0.6	1.6
Metal tanks	306.2	0.2	0.7
Motors and generators	341.7	−0.4	1.7
Motor trucks	290.3	0.2	3.7
Office and store equipment	154.0	0.0	−0.3
Paperboard	293.4	0.5	13.1
Paper boxes and shipping containers	272.8	1.1	8.3
Paper office supplies	243.5	0.0	7.1
Paint	277.0	−0.4	4.7
Plastic resins	308.8	0.0	3.7
Precision measuring tools	255.0	0.1	4.3
Pumps and compressors	354.3	1.1	2.5
Refractories	366.6	1.1	3.8
Rubber belts and belting	346.7	−0.7	6.1
Scales and balances	230.2	−0.9	0.9
Steel products	365.3	−0.2	2.5
Switchgear	274.9	0.1	0.6
Textiles, synthetic fibers	157.5	−0.4	−1.1
Textiles, gray fabrics	154.7	0.0	2.2
Tires and tubes	243.9	−0.8	0.6
Transformers and power regulators	228.9	0.4	3.2
Welding equipment	284.6	0.1	2.3
Wire and cable	201.4	0.2	−0.1

Industrial prices



Source: Bureau of Labor Statistics

BUSINESS DATATRAK



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

There are still a considerable number of price declines sprinkled in among the "no changes" and few increases. Over the last month or so, for example, weakness has persisted in such key areas as steel, many nonferrous metals, petrochemicals, and a host of component parts.

Energy tags, too, have been on the shaky side—with overall averages off more than 1% over the last year and gasoline viewed separately down by close to 6%. More important, recent weakness in world crude oil prices would seem to just about rule out any near-term increase in this critical sector.

Finally, even machinery hasn't escaped the downward pressure with farm equipment especially soft. Ditto, office equipment where competition and technological breakthroughs continue to make for easiness in computers, office copiers, and even typewriters.

Taking all the above price indicators plus recent surveys of both buyers and sellers together, industrial producer tags don't look to advance by more than a few tenths of a percentage point a month with averages rising no more than 1-2% by late spring.

STEEL SCENE

Still sluggish on steel front

The sluggish steel buying pattern of late 1984 is spilling over into early 1985.

That's what both purchasing managers and service centers say. Thus, 31% of PMs responding to the latest NAPM steel buying survey expect to slow their purchases of the metal over the next three months—almost double the 17% who are currently contemplating first quarter increases.

The major reason seems to be concern over current inventory holdings. Some 46% of the queried buyers, for example, now plan on leaner stocks over the January-June period—far outweighing the miniscule 3% who feel that some further additions may be in order.

Part of this inventory retrenchment could be due to concern about future steel usage rather than to any sudden surge in steel stocks—for there's little to suggest the latter. Indeed, days supply levels haven't really moved up—holding around the 2-month level now for three straight months and actually remaining a bit under the highs hit late last summer.

Service centers tell pretty much the same story: the likelihood of reduced activity and plans for inventory cuts on their level, too. On the activity front, for example, some 28% of Steel Service Center Institute (SSCI) members surveyed feel that their orders will decrease over the next three months—vs. only about 12% who are counting on gains.

And once again, inventory paring seems to weigh heavily in their near-term plans. Specifically, some 53% say they will be cutting stocks over the next three months—in sharp contrast to the only 5% who plan on adding.

But this, too, could be an exaggeration, given current day's supply figures. Service center holdings, for example, are off a fair amount from recent September highs.

Moreover, the near-term service center caution contrasts with their optimism over the longer pull. Their feeling on the latter score is perhaps best expressed by Andrew G. Sharkey, SSCI president, who recently repeated an earlier prediction that 1985 shipments would be up anywhere from 800,000 to 1 million tons.

On the other hand, Sharkey does admit that gains will be spotty rather than across the board.

Given the above, he feels that much of the projected 1985 service center gains will come from improving market share vis-a-vis the mills.

It might also be added that mill men are also fairly bullish over the longer pull. Thus they put domestic shipments as high as 79 million tons.

Much of this optimism is premised on a decline in imports due to recently announced voluntary curbs.

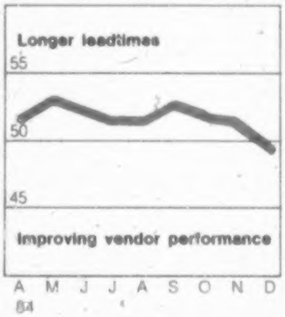
Many steel buyers, for example, are still talking about greater rather than a reduced dependence on off-shore suppliers (21% seeing increases over the next six months vs. only 6% anticipating declines).

Service centers would seem to agree on this, too, with more than one out of every five respondents noting 11-20% price breaks in both the carbon and stainless steel sectors.

Monthly procurement status report

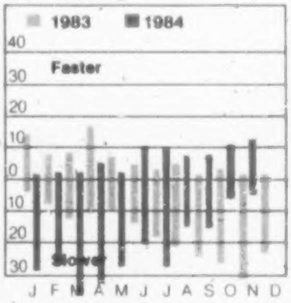
Leadtime index

A 'diffusion' index based on 158 key commodities. Above '50' indicates a tendency for leadtimes to stretch out. Below '50' suggests improving vendor performance.

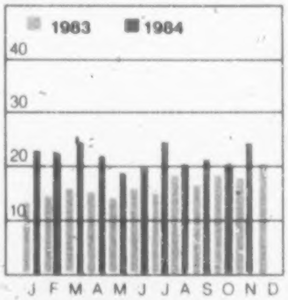


Delivery performance

Percent reporting deliveries

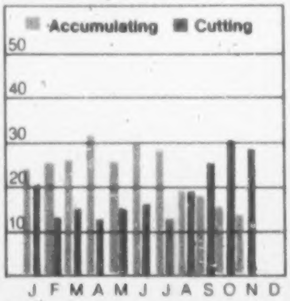


Forward commitments



Inventory strategy

Percent of respondents



Source: NAPM

PROCUREMENT STATUS

Looks like a buyers' market

The current business pace is making life a bit easier for purchasing managers these days, providing them with more bargaining leverage, fewer delivery delays, and generally slowly shrinking leadtimes.

The impact can best be appreciated by comparing current waits with those of a few months back. Many items have held steady. But out of the product lines monitored regularly by *PW*, the number coming in now is far greater than those still stretching.

This is borne out by *PW*'s exclusive leadtime index, which is under the neutral 50 level for the second straight month, and by the NAPM Business Survey question on speed of delivery: 11% of the respondents reported faster deliveries vs. 5% noting slowdowns.

That is a 6% difference and is 3% above last month—a refreshing change from the string of negative differences that appeared before.

Another sign of a buyers' market is the continued inventory paring that is being reported. Last month, for example, cutters outnumbered accumulators by better than a 2:1 margin—28% cutting vs. only 13% adding to stocks—marking the second straight month that there has been such a big differential.

Apparently, most purchasing managers have deliveries under control and are cutting stocks to minimum levels. The fact that operating rates in so many industries are also well below preferred levels would also tend to support this "keep 'em lean" strategy.

So would the dwindling list of items in short supply. Over the past month, the NAPM listed only one item, tall fatty acids. Electronic components, which have been steadily mentioned in the past, were conspicuous by their absence.

What's ahead? Most buyers queried see about the same pattern through late winter and into spring.

Leadtimes

Chicago: Changes both ways here. Coming in are chlorine (1-2 weeks), bichromates (1), plastic film laminations (10-12), narrow galvanized sheet (6), and wide galvanized sheet (8). Edging out are aluminized sheet (7), plastic shrink film bags (6), and PVC resins (1-4).

Cleveland: Status quo here with these weekly leads: corrugated (3), folding boxes (4), 2-ply fiber drums (2), reconditioned steel drums (1-2), coil coating paint (5), polyethylene and PVC resins (3-4), cold-finished aluminum (12-14), and alloying materials (on demand).

Los Angeles: Heavy duty aluminum sheet is in (to 13 weeks). Other reduced weekly waits include copper tubing (12-14) and electronic components (17-26). Lengthening somewhat are grey iron castings (7-8), brass castings (8-10), heavy duty steel (12-14), aluminum pipe (17), electric cable (17-26), and fasteners (16).

BUSINESS DATATRAK

Houston: Poor demand has reduced waits for high-pressure heat exchangers (to 26-35 weeks). MRO items remain stable at 0-3 weeks. Ditto electronic components (6-8), centrifugal compressors (41-56), turbogenerators (21-65), forgings (5-7), control valves (8-26), structural steel (13-17), and pumps (0-6).

Philadelphia: Stainless steel round coil has come in to 12 weeks. Further spotty declines in other steel areas are expected if demand remains soft. Xerographic paper has softened to 1-2 weeks. Corrugated has stretched (to 3). No changes in MRO items such as standard drills and taps (2-4).

Pittsburgh: Leads on some alloying materials have dropped—to 2 weeks on manganese and to 3 on silicon. Other current weekly waits: polyethylene (5), PVC resins (6), plastic bags (3-4), paper bags (4-6), corrugated (3-4), all types of drums (1), lumber (3-4), and steel strapping (2-3).

Leadtimes (in weeks)

STEEL	Now	Month ago	Six months ago
Sheet (Phil)	9	9	9
C-R Sheet (Chgo)	5	5	5
Plate (Phil)	10	10	10
Plate (Chgo)	2½	2½	2½
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	7	7	7
H-R Bars (Chgo)	3	3	3
Cold-Drawn Bars (Phil)	7	7	7
Galvanized (LA)	14	14	14
Galvanized (Chgo)	6	10	6
Structurals (Chgo)	4½	4½	3½
Structurals (Hous)	17	17	17
Tubing (Phil)	7	7	7
Grey Iron Castings (LA)	7½	7½	5
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	6	6	6
Pipe, Carbon (Hous)	13	13	13

ELECTRIC & ELECTRONIC	Now	Month ago	Six months ago
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	17	17	17
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	7	7	7
ICs (Linear) (Phil)	17	17	20
Motors (Phil)	15	15	15
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	10	10	20
Relays (Chgo)	15	15	15
Resistors (Chgo)	12	12	14
Resistors, Wirebound (Phil)	10	10	10
Transformers (Chgo)	10	10	10

LUMBER	Now	Month ago	Six months ago
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	2	2	2
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	½	½	½
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½

CHEMICALS-PLASTICS	Now	Month ago	Six months ago
Adhesives (LA)	½	½	½
Napthalene (Chgo)	2	2	2
Paint (LA)	5	5	5
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	3½	3½	3½
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	3	3	3
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	2½	2½	3
PVC Resin (Pgh)	6	6	6
Titanium Dioxide (LA)	1	1	1

PACKAGING	Now	Month ago	Six months ago
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	3	3	3
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	6	4	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3

PAPER	Now	Month ago	Six months ago
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½

NON-FERROUS	Now	Month ago	Six months ago
Aluminum Coil (Chgo)	7	7	13
Aluminum Plate (Chgo)	14	14	14
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	11	11	13
Brass Castings (LA)	9	9	7
Brass Rods (Chgo)	6	6	10
Brass Sheet (Chgo)	7	7	17
Brass Tube (Chgo)	5	5	9
Copper Fittings (LA)	3½	3½	3½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	5½	5½	5½
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	4	4	4
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	5	5	5
Zinc (Pgh)	2	2	4

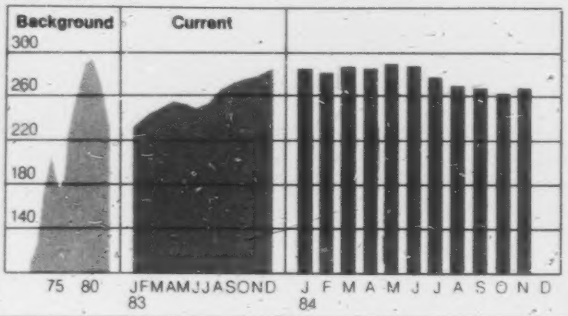
MISCELLANEOUS	Now	Month ago	Six months ago
Bearings, Domestic (Phil)	22	22	22
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	50	50	48
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	1½	1½	1½
Fasteners (LA)	7	7	7
Fasteners, Std. (Phil)	4	4	2½
Heat Exchangers, Carbon-alloy Steel (Hous)	20	20	20
Heat Exchangers, Hi-pressure (Hous)	31	35	43
Insulation Mat'l. (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	2½	2½	2
Pumps (Hous)	35	35	35
Pumps (LA)	9	9	9
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	17	17	17
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Latest month	268.3
Month before	266.4
Year ago	179.8

Index: 1967 = 100



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	347.00
Steel, structural shapes, Pitts., cwt	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt	25.10	25.10	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	23.95	23.95	17.50
Steel, bars, Pitts., cwt	23.95	23.95	17.50
Steel, bars, C.R., Pitts., cwt	29.25	29.25	26.00
Steel, plates, Pitts., cwt	23.25	23.25	23.25
Steel, plates, H.R., Pitts., cwt	23.25	23.25	23.25
Steel, sheets, C.R., Detroit, cwt	27.10	27.10	26.15
Steel, strip, C.R., Chi., cwt	35.30	35.30	35.30
Steel, basic wire, Pitts., cwt	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.538	0.555	0.750
Antimony, in alloy, lb	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb	5.20	5.20	4.95
Brass, red, 85%, [sheet], lb	1.25	1.28	1.22
Brass, yellow, [sheet], lb	1.20	1.23	1.17
Cadmium, ton lots, lb	1.25	1.55	1.25
Copper, electrolytic, wire bars, refd., lb	0.63	0.66	0.67
Copper sheet, over 24 in., lb	1.34	1.37	1.31
Lead, common, N.Y., lb	0.23	0.25	0.25
Magnesium, pig ingot, [99.8%], lb	1.48	1.48	1.38
Mercury, 20 fl. lots, N.Y., fl.	323.00	328.00	323.00
Molybdenum Climax Oxide/bags, lb	4.65	4.65	4.65
Nickel, electrolytic, producer, lb	3.20	3.20	3.20
Platinum, producer, oz.	475.00	475.00	475.00
Silver, N.Y., oz.	6.87	7.80	9.35
Tin, Straights, N.Y., lb	6.02	6.14	6.30
Zinc, Prime West, East St. Louis, lb	0.45	0.45	0.49
Zinc, die casting alloy, No. 3, lb.	0.515	0.515	0.555
PAPER			
Uncoated book #3 offset, ton	850.00	850.00	760.00
Watermarked bond, ton	985.00	985.00	915.00
Gummed sealing tape, carton	16.25	16.25	15.45
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	495.00	495.00	475.00
Wrapping paper, std. distributor cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	350.00	350.00	290.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	0.400	0.399	0.317
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.04	1.04	1.02
Cotton middling, 1", N.Y., lb	0.603	0.588	0.716
Printcloth, 48", 80x80, N.Y., spot, yd.	0.78	0.80	0.85
Army duck, 37", 13 oz., yd.	1.78	1.78	1.69
Blended printcloth, 64", 78x54, yd.	0.77	0.70	0.71
20s combed yarns	2.12	2.12	2.10
Wool tops, N.Y., lb	3.60	3.60	3.60
CHEMICALS			
Acrylonitrile, tanks, lb.	0.455	0.455	0.430
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	195.00
Benzene, petroleum, tanks, Houston, gal.	1.15	1.16	1.45
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	0.58	0.58	0.58
Formaldehyde, USP, 37% [12% to 15% meth.], tanks, lb.	0.106	0.106	0.106
Glycerine, synthetic, tanks, lb.	0.81	0.81	0.73
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.54	0.54	0.45
Naphthalene, crude, tanks, lb.	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.305	0.305	0.305
Polyethylene resin, low density liner film grade (market price), lb.	0.29	0.29	0.42
Polypropylene, homopolymer grade (market price), lb	0.38	0.38	0.38
Polystyrene, general purpose grade (market price) lb.	0.37	0.37	0.40
Shellac, bone dry, N.Y., lb,	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.35	0.35	0.35
Sulphur, crude, ex-terminal, Tampa, Fla., lt	162.50	147.50	132.50
Sulphuric acid, 66%, commercial, tanks, ton	56.85	56.85	56.35
Titanium dioxide, anatase, reg., carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.,	1.26	1.25	1.35
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	308.95	306.85	318.25
Lumber, 2x2, pine, mbf, cl	286.15	292.50	313.50
Plywood, plyform, ¾", msf, cl	573.05	575.00	546.35
Plywood, ⅝", msf, cl	379.15	381.35	355.25
Cement, bulk, ton, tl	63.74	63.74	61.88
Sand, ton, cl	6.23	6.22	5.99
Ready-mix concrete, 3,000 psi/cu.yd., 15 cu. yd.	47.62	47.62	45.64
Crushed stone, 1½", ton, cl	7.47	7.44	8.01
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.79	0.78	0.76
Gypsum sheathing, ½"x1"x8", msf, tl	206.40	208.77	181.57
Brick, common, per thousand, tl	177.23	175.63	171.33
Asphalt paving, AC-20	172.14	171.03	158.71
Concrete sewer pipe, 12", prem. joint, per foot, cl	7.13	7.11	6.80
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl	26.25	26.25	24.40
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	30.75	30.50	30.75
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.760	0.805	0.820
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.723	0.770	0.770
Heating oil, No. 2, Chi., bulk, gal.	0.795	0.800	0.785
Heating oil, No. 2, N.Y., bulk, gal.	0.808	0.808	0.818
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.50	26.50	26.25
Jet kerosene, gal.	0.768	0.760	0.780
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.425	0.420	0.460
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	81.00	81.00	90.00
Steel, No. 1, hvy., dlvd., Chi., ton	75.00	82.00	83.00
Copper, No. 1, East, wholesale buy, dlvd., lb	0.545	0.560	0.605
Copper, No. 2, East, wholesale buy,	0.455	0.465	0.510
Brass, red, East, wholesale buy, dlvd., lb.	0.505	0.520	0.565
Brass, yellow, East, wholesale buy, dlvd., lb.	0.345	0.335	0.320
Alum., old sheet/cast, E., wholesale buy, dlvd., lb	0.335	0.325	0.450
Alum., mixed clip., E., wholesale buy, dlvd., lb.	0.355	0.345	0.475
Zinc, old, East, wholesale buy, dlvd., lb.	0.20	0.20	0.19
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.12	0.13	0.15
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	15.00	24.00	25.00
Paper, old corrug. box, dlr., N.Y., ton	10.00	15.00	21.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.120	0.120	0.105
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.35	0.37	0.33

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

reduction.

The reasons are not too hard to find: (1) Outlays for entitlement programs will still be increasing, (2) Defense spending looks to be headed higher, (3) Net interest is already running over $120 billion at annual rate and is increasing $20-25 billion a year, and (4) Transfer payments are still rising.

True, social programs can be cut some. And some paring of defense spending is feasible. But much depends on the international situation and progress in arms control talks.

In any case, it is doubtful the new Congress will take much action to control the deficit, let alone make any significant moves to bring it down very much. And, if the economy should stumble, the deficit could well worsen. In short, **we will be living with triple-digit budget deficits for a long time to come.**

The U.S. dollar

In the year just ended, imports exceeded exports by more than $120 billion. That compares to a $61 billion red ink figure in 1983 and only $36 billion in 1982.

Reason: still-bouyant U.S. economy and super-strong dollar. The impact of the latter cannot be underestimated. And **the dollar is not likely to weaken appreciably over the next year.**

Expect our trade deficit to remain large—maybe even grow a bit more in 1985. Recently announced import curbs in the textile and steel sectors may provide some marginal relief, but don't expect that action to turn the tide. Any major improvement in the trade imbalance would probably require a 10% or more decline in the dollar. That does not seem to be in the cards.

Signals mixed in NAPM committee eyes

Robert J. Bretz C.P.M., director, corporate purchasing, Pitney Bowes, and chairman, Business Survey Committee of NAPM.

The respected NAPM Business Survey Committee is viewing the upcoming year with mixed emotions.

On the positive side, the NAPM committee sees another good year for prices—maybe even a bit better than 1984. But because much of this is predicated on decelerating business activity, the NAPM committee remains a bit apprehensive on just how much growth we can expect from the economy.

Only about half of the 250 top purchasing executives who report to the Business Survey Committee feels 1985 will be better than last year. While still far above the 19% who feel things could deteriorate, it does represent a major shift in thinking from a year earlier when a similar question elicited an 86% "better" and only 5% "worse" response.

The big concern seems to be about the second half of the year when 22% see declines—not all that many fewer than the 29% who are still betting on continued improvement over the first six months of the year.

In the words of NAPM committee chairman Robert J. Bretz: "After watching the economy weaken over the past months, PMs are only guardedly optimistic about predicting renewed expansion in the first half before seeing a slowdown again in the last half.

Bretz, who is director of corporate purchasing for Pitney Bowes, adds that this less-than-sensational outlook means less pressure on prices. He sees fewer increases in the first half of 1985—with quite a few declines also possible.

The survey findings would certainly seem to support this appraisal. Specifically, only 54% project price increases over the next six months—down sharply from 18 months ago when responses revealed anywhere from 85-90% of the queried PMs were reconciled to paying high prices.

...continued

Equally significant, the number who now anticipate across-the-board increases has dropped from 33% six months ago to only 16% now. And the number who would characterize any near-term increases as moderate or severe has declined—from 88% six months ago to only 40% currently.

Finally, it might also be noted that 7% now feel they may be able achieve lower procurement costs over the next six months—in sharp contrast to the zero reading obtained when this same question was asked both six months and a year ago.

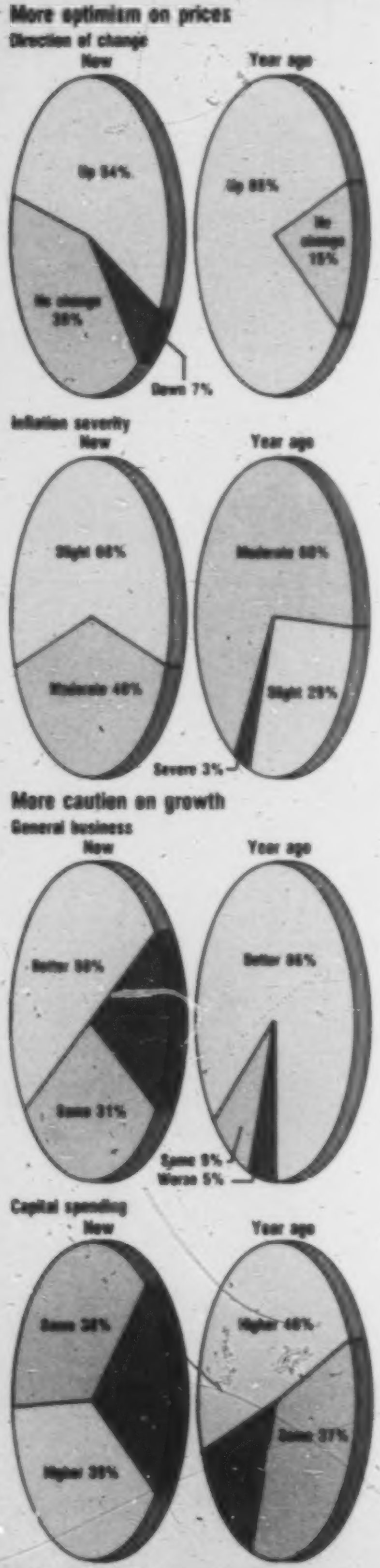
One reason for the increased hold-the-price-line optimism—aside from less ebullient demand—could be the absence of any serious supply restraints. This shows up in the answer to a question on capacity—with only 27% reporting current operating rates of 90% or more—down significantly from the 39% figure of just six months earlier.

At any rate, Bretz, taking his cue from the survey findings, feels that procurement costs should be relatively flat through the first quarter—and maybe even for the entire first half of the year.

As noted earlier, this confidence on prices has to be weighed against worries about the economy. On the latter score, only 44% of the respondents said they are optimistic about the new year—well under the near 70% readings of other recent surveys.

The fact that the remaining 56% are either concerned or actually worried (vs. only 31% six months ago) does seem to suggest that 1985 will be a year that will bear close watching.

1985: an NAPM evaluation



Source: NAPM Business Survey Committee

Top executives are still bullish

Top corporate executives are still bullish on America.

The demand gains the business pros see for 1985 are far from spectacular. But the average advance seen for all manufacturing is still impressive given the fact that the nation is now entering its third consecutive year of business recovery.

Inflation estimates are also on the rosy side—with not one single industry anticipating more than a 6% price increase. While capital spending may decelerate, most industries will still remain firmly in the plus column as far as adding new plants and equipment.

Here are some of the actual details—culled from a new McGraw-Hill survey of more than 550 leading U.S. firms:

Growth: Real demand (sales deflated for price increases) is expected to rise by about 4.4% in the manufacturing sector over the new year—with durable goods outpacing the average.

Biggest individual advances projected: aerospace (11.5%), electrical machinery (10.0%), fabricated metals (8.5%), and instruments (8.1%). On the other hand, rather poor performances are seen in a few sectors—namely textiles (up only 0.3%), nonferrous metals (up 0.5%), rubber and plastics (up 1.3%), and automotive (up 1.9%).

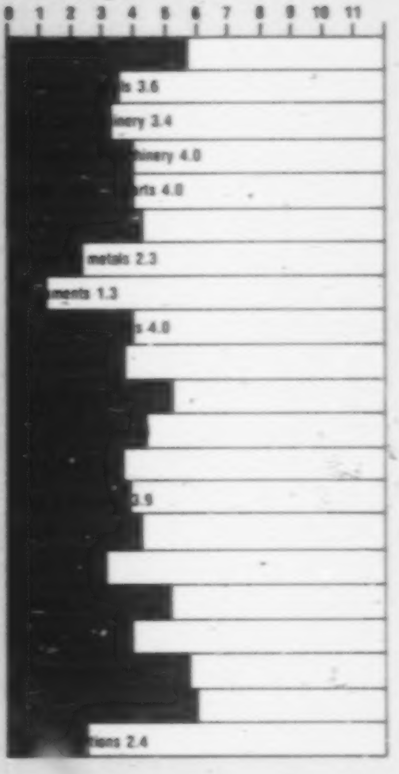
Prices: Only about a 4% increase in industrial inflation is currently being projected. This, incidentally, is pretty much in line with forecasts being made by purchasing managers, business analysts, and most econometric models.

But again there could be some industry-by-industry variations. Specifically, lower-than-average increases are anticipated for instruments (1.3%), fabricated metals (2.3%), and communications (2.4%).

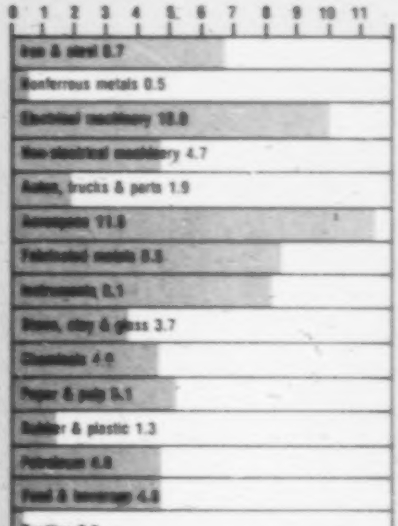
On the other hand, bigger-than-average boosts could be in the cards for gas utilities (6.0%), electric utilities (5.8%), iron and steel (5.7%), paper and pulp (5.3%), railroads (5.1%), and plant and

How business views 1985

Prices
(% change 85/84)



Real demand:
(% change 85/84)



equipment viewed as a whole (5.3%).

Capital spending: Some slowdown in the rate of increase is expected—with the total anticipated gain falling from near 15% in real terms in 1984 to only about 4.3% over the next 12 months.

But following a banner 1984, this should not be construed as being overly bearish. Also, as the survey points out, corporate executives tend to underestimate capital spending when talking about an upcoming year—with the average shortfall over the past few decades put at near 4.5%. If this holds true for 1985, then inflation-adjusted spending gains could be more in the order of 9-10%.

But even without some upward adjustment, there are some industries that will do amazingly well on the capital spending front in 1985. Autos are a case in point—where a whopping 36-37% real increase is projected. And it makes a lot of sense for two reasons: (1) There is still a need to raise productivity to compete with imports, and (2) Automotive profits are high enough to finance major capital projects.

Some other durable goods industries are sporting hefty 1985 capital budgets, too. Steel, enjoying its first profitable year since 1981, plans a huge 32% real increase in spending. And nonelectrical equipment, buoyed by a strong order pattern (up 25% in 1984), is planning on a real spending jump.

The projected capital goods increases in nondurables will generally be smaller than those planned for durables—with the average rising only 8% in real terms. Moreover, some key sectors will fall below this average—notably paper, where only a 5% real gain is projected.

But even this doesn't tell the whole story. Textile mills, for example, actually expect to cut their outlays by 12% in real terms—as the industry's cash position is adversely affected by competitive pricing and a huge import influx.

A mixed picture is suggested in transportation. Railroads, for example, plan on a relatively flat pattern—unchanged from 1984 which was up by more than 35%. But the airlines are heading for a big 25% real increase—in sharp contrast to the 23% decline noted during 1984.

A few words are also in order about preliminary 1986 capital spending estimates. They are currently expected to be off 2% in current dollar terms—and probably 6-7% in real terms if 1985 price patterns spill over into the following year.

To be sure, forecasts for more than one year ahead are usually subject to change—and generally undershoot the mark. Nevertheless, in the words of one McGraw-Hill spokesman, "The 1986 projection is unusually low and may thus give pause for thought."

Models agree economy will grow—but slower

There is a surprising consensus among the big computer-based econometric models these days. With little or no variation, they are all signaling modest deceleration in the rate of growth over the coming year—plus another 12 months of tolerable price increases.

The picture isn't bad. It suggests continuing, although smaller, gains—thus refuting the prophets of gloom and doom who see a recession ahead.

Instead, the forecasts are actually better than those made six months ago in *PW*'s mid-year report (*July 1984*). At that time, the average real GNP advance for 1985 for the four models was put at 2.5%—some 0.5 percent under the recently revised estimate.

Prospects for 1986 do not suggest

PW's econometric model printout

Real GNP (% change)	1985	1986
DRI	2.7	2.2
Chase	2.5	3.0
Wharton	3.6	1.5
Merrill Lynch	3.1	2.5
AVERAGE	**3.0**	**2.3**
Industrial production (% change)		
DRI	3.4	2.6
Chase	2.9	1.3
Wharton	3.6	0.7
Merrill Lynch	3.4	1.0
AVERAGE	**3.4**	**1.4**
GNP price deflator (% change)		
DRI	3.8	4.5
Chase	4.4	5.6
Wharton	4.5	5.5
Merrill Lynch	4.5	5.1
AVERAGE	**4.3**	**5.1**
Finished producer prices (% change)		
DRI	2.5	4.2
Chase	2.4	4.3
Wharton	3.3	4.8
Merrill Lynch	4.2	3.5
AVERAGE	**3.1**	**4.2**
Consumer prices (% change)		
DRI	3.9	4.5
Chase	4.0	4.9
Wharton	3.8	5.0
Merrill Lynch	5.0	5.0
AVERAGE	**4.2**	**4.8**
Prime interest rate (%)		
DRI	13.5	12.3
Chase	11.8	12.2
Wharton	12.4	14.2
Merrill Lynch	13.0	11.3
AVERAGE	**12.7**	**12.5**
Unemployment rate (%)		
DRI	7.3	7.7
Chase	7.4	7.6
Wharton	6.5	6.9
Merrill Lynch	7.3	7.5
AVERAGE	**7.1**	**7.4**

disaster either. Not one single model sees an actual decline—with the overall gain that year generally put in the 3% range—quite acceptable considering that 1986 would be the fourth consecutive year of business recovery.

Equally significant, the same optimism seems to have spread to the price sphere. In fact, the previous estimate for the 1985 GNP deflator advance—5.5%—has been toned down more than a full point to 4.3%.

The improvement is even more apparent in the producer price sector where an earlier 6.0% increase has dropped to only 3.1%. And the same is true of the cost-of-living index where a 5.8% increase has been revised downward to only 4.2%.

Comments by spokesmen for all four of the econometric models indicate that the price improvement stems from a combination of several factors, including a strong dollar, ample supplies, relatively restrained labor cost increases, the absence of any new energy pressures, and a bumper food crop.

Note, too, that this same pattern of relatively restrained inflation is expected to spill into 1986 with all three of the price yardsticks just mentioned (the GNP price deflator, finished producer prices, and the cost of living) expected to accelerate by only one percentage point or less.

This is not to say that the next two years will be problem-free. Interest rates, for example, are expected to remain high—with the averages for both 1985 and 1986 put at 12.5% (almost 1.5% above recent lows).

Nor are jobless rates likely to fall. The 7.1% and 7.4% averages projected for 1985 and 1986, for example, are only fractionally under last year's reading. And as one model analyst puts it: "This is still well above historical norms."

Finally, a few words on the accuracy of these mathematical forecasts would seem to be in order. The model building profession has been the target for considerable flak in recent years. But there are several reasons why increased confidence now seems to be justified: (1) Forecasting approaches have been fine-tuned to make them more realistic; (2) 1984 projections were pretty much on the mark; and (3) there is (as suggested above) little disagreement on the part of all four surveyed models as to where we seem to be heading over the next year or so.

On the latter score, there is generally less than one percentage point difference in individual model estimates of real GNP, industrial production, most price yardsticks, unemployment rates, and interest rates. Apparently the signals that call the turn on these key economic variables are coming in loud and clear this time around.

Some product lines in for hefty price boosts

Don't be fooled by the slight average increases being projected by most big-picture price indexes. They could be masking some fairly substantial boosts in individual product lines.

Thus some steel and nonferrous products—which have so far failed to recover from the last recession—seem headed for some hefty increases. And machinery items won't be quite the bargain they have been over the past few years.

This appraisal, part of the latest Data Resources Inc. (DRI) quarterly outlook, can best be summed up as follows: Past emphasis on price inflation is shifting to more specific timing and attention to relative escalation of individual product prices.

Here is DRI's more detailed rundown on how specific price trends are shaping up over the next two years (please refer to the accompa-

Price outlook through 1986
(Comparison of fourth quarter pricing)

Percent change	1985/84	1986/85
Raw materials, energy		
Pulp and paper	5.8	6.3
Supplies for manufacturing	11.2	9.3
Residual fuels	3.8	1.9
Processed fuels & lubricants	3.2	1.8
Metals		
Nonferrous scrap	8.9	13.3
HR steel bars (carbon special)	4.2	6.7
HR steel strip (carbon)	5.7	7.8
Copper & brass mill shapes	9.4	8.3
Hardware	4.2	4.9
Components		
Laminated plastic sheets	3.0	5.8
Internal combustion engines	5.1	7.2
Primary batteries	3.2	6.9
Electronic parts	2.2	3.8
Machine shop products	8.3	6.5
Fasteners	4.0	7.1
Tires	4.7	5.2
Construction products		
Plumbing fixtures	6.6	7.6
Insulation board	3.6	2.8
Asphalt roofing	5.0	5.3
Concrete ingredients	8.0	7.7
Concrete products	8.2	7.1
Metal doors	5.0	7.0
Prepared paint	3.7	4.6
Measuring		
Integrating & measuring instruments	4.6	3.8
Metalworking machinery	6.2	6.3
Oil field equipment	5.1	7.6
Trucks	5.4	6.7
Special industrial machinery	10.2	8.5
Transformers & power regulators	4.0	4.7
Pumps and compressors	7.3	7.6

Source: Data Resources, Inc.
Cost Forecasting Service

nying chart for additional details).

- **Natural gas**: Recent crude oil price declines will continue to exert competitive pressure on gas. This petroleum factor, combined with a gas surplus, should undermine chances of rapid escalation following this month's partial deregulation of the industry. As such, producer prices for gas fuels are projected to advance at only a 1.1% average annual rate over the 1985-86 period.
- **Electricity**: Some deceleration is being projected after the big 9% jump reported for the first nine months of 1984. Specifically, the producer price index for electricity projects an average annual rate of only 4.8% this year and 3.6% for 1986.
- **Steel**: Acceleration seems to be unavoidable—with the official producer price index of steel mill products moving up 5% over the next four quarters and about 6.8% in 1986—well above last year's modest 3% advance.
- **Nonferrous metals**: Some fairly big hikes are likely. Increases for 1985 and 1986 are estimated as follows: domestic copper cathode (12.2% and 10%, respectively), primary aluminum ingot (4.6% and 9.9%), lead (7.4% and 6.4%), and zinc die casting alloy (6.6% and 7.5%).
- **Metal components**: Good news here. The seven product lines monitored by DRI are expected to move up only 4.1% this year and 5% in 1986.
- **Industrial chemicals**: Potent foreign competition, combined with modest cost escalation, suggests about a 3.1% average annual advance over the next two years.
- **Construction materials**: A mixed picture for 1985—hikes as high as 8.6% are seen for sand, gravel, and crushed stone. These will be offset by fractional declines of 0.2% and 0.3% in plastic construction products and flat glass, respectively. The bulk of the 1985 hikes will fall in the 3.5-4.5% range.

For 1986, average increases could accelerate into the 4.6-6.5% range.

- **Electronic components**: Capacitors, which declined 0.8% in 1984, are expected to rise 1.8% and 5.4% in 1985 and 1986. On the other hand, the MOS integrated circuit price index (which rose 4.8% in 1984 because of shortages) will drop 0.6% in 1985 and by an even bigger 1.6% in 1986—as the price of the newer 256K DRAMS and CMOS technology comes down.
- **Machinery**: Producer goods, on average, will escalate slowly—rising 4.2% by 1986 (vs. only 1.6% in 1983). Increases in electrical machinery will be above this average—4.5% over the next four quarters and 5.9% in 1986. Ditto construction machinery where increases for 1985 and 1986 are projected at 6% and 8.1% respectively. **PW**

For additional copies of this special "Forecast '85" issue, please contact PurchasingWorld, 6521 Davis Industrial Pkwy., Solon, OH 44139.

Coming up in the February issue of PW: Trends in Software Buying

Coming up in the March issue of PW: Special Report on Transportation

Coming up in the April issue of PW: Steel Market Trends

Survey of the month

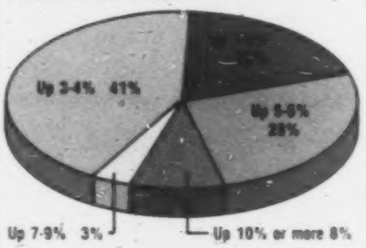
PMs aren't "buying" talk of recession

Another good year seems to be in the making. But depending on the industry in question, there could be significant variations on both the demand and price fronts.

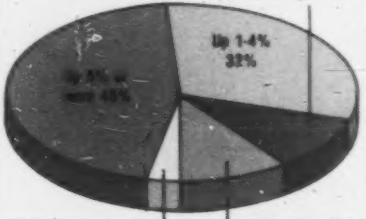
That's the thrust of a new nationwide ***PurchasingWorld*** "forecast" survey. To be sure, few of the survey respondents see actual sales declines or a return to double-digit inflation. But the survey findings do suggest an end to the rather homogeneous pattern of the last 12 months.

How PW readers see 1985

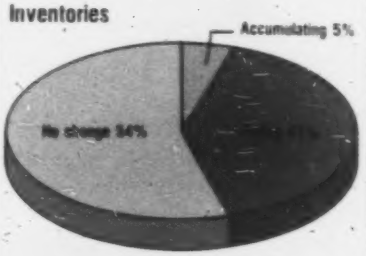
Procurement costs



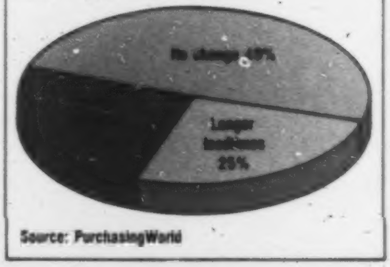
Company activity



Inventories



Delivery performance



Source: PurchasingWorld

The situation is perhaps best summed up by one Midwestern buying executive who feels that "imbalances are unavoidable after two straight years of recovery. And while we should continue to end up in the plus column, things are not going to be quite as easy as they were in 1984."

Some of the survey's more specific findings tell the story:

- **1985 company demand:** The average 4-5% anticipated increase masks some wide differences. More than 40% of the respondents are betting on 5% or higher gains—while at the other end of the spectrum one out of four sees no gain or even actual decline.
- **1985 GNP trends:** PMs apparently are not buying talk of a recession. When asked to differentiate between the first and second halves of the year, a surprising 51% thought that the last six months of the year would be better than the first six—more than three times the 16% who felt smaller gains might be in the cards.
- **1985 prices:** The average 4.5% increase in the typical firm's procurement costs is about what most other analysts are calling for. There could be some exceptions, however—one out of ten respondents anticipates price increases of 7% or more. Also worth noting: About half the queried buyers say that their average price increase will be larger in 1985 than it was in 1984.
- **Second half 1985 prices:** Some speed-up from the first half to the second half is also expected—59% anticipate price acceleration in the last six months—in sharp contrast to the 3% who feel that increases may simmer down as the year wears on. A more reassuring note: Virtually all of those respondents projecting acceleration say that it will be quite moderate.
- **Inventories:** Close-to-the-vest strategy is apparently still the order of the day. Despite anticipated demand gains, less than one out of ten respondents plans to boost near-term stock levels. The fact that 41% are anticipating reductions has to be regarded as significant.
- **Leadtimes:** Pretty much the status-quo here. True, one out of four buyers sees somewhat longer waits. But that is offset by a similar number of survey respondents seeing contractions. The remaining 50% are betting on little or no overall change. This, incidentally, marks a change from a year ago when a similar question elicited a 79% response for stretchouts and only 7% for shorter leadtimes.
- **Supply problems:** Dislocations are expected to be few and far between—with only 13% of those surveyed expecting any kind of headaches. And even those should be spotty—limited to integrated circuits and other solid state devices, kraft paper boxes, and tall oil fatty acids.

Conspicuous by its absence is concern about metals, chemicals, and component parts expressed last year at this time.

- **1985 problems:** High on the list of possible headaches are (1) the need to beat back price-boosting attempts which are expected to become a lot more numerous this year, (2) product quality which still leaves a lot to be desired in some areas, (3) the very real possibility of strikes, (4) the impact of foreign import curbs—especially on steel and textiles, (5) continuing high interest rates, and (6) the financial health of some of the smaller suppliers.
- **1985 purchasing strategies:** The accent these days is on improving quality, insuring better on-time delivery performance, and the development of more long-term commitments. More consideration is also being given to foreign sourcing, continuing development of just-in-time inventory systems, consolidation of buying, and reduction of supplier bases (with emphasis on fewer but stronger vendors). ***PW***

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At GTE the challenge is to run purchasing as a business

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Helping you manage the business of buying

Vol. 29 No. 2-February, 1985

Features

30 The challenge is to run purchasing as a business
"The great danger is that we will go on improving something that we should not be doing in the first place," says GTE's energetic vice president for materials management, John Davin. In this exclusive interview with *PW* editorial director Paul Farrell, Mr. Davin shares his insights into the changes and challenges facing purchasing/materials management

37* Special section on computer software

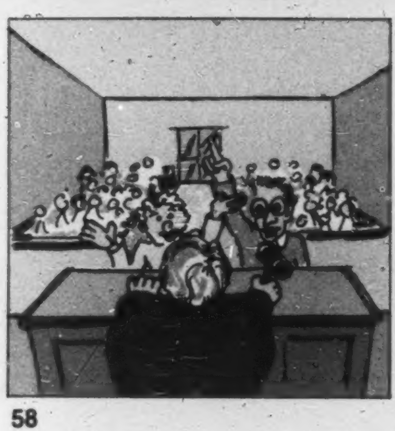
- **37* Meeting the challenge of purchasing software**
  As the choices in purchasing computer hardware and software become more complex in the face of rapid developments, Dr. Robert M. Monczka, C.P.M. offers some refreshing guidance to help PMs cut through the maze and confusion surrounding such purchases.

- **42* How to buy personal computer software**
  In an additional part of this special section *PW* feature, Donald Boudreau, vp for operations for Computer Software Inc., discusses ways to approach buying PC software and the pitfalls to avoid by using judicious selection techniques.

44* Inventories: a realistic current evaluation
Noted *PW* consulting economic expert Dr. Louis J. Paradiso takes an in-depth look at inventories and finds them holding steady at historic lows, with very little change in the offing.

52* Packaging prices on the rise
PMs see a moderate rise during 1985 in packaging prices in this exclusive nationwide *PW* survey, although some see a little shading in some lines. The only fears seem to be of leadtime extensions and some mention of tightness in corrugated and glass.

30



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PW PREDICTS

Robert S. Reichard, executive editor

Prices look to be pressure-free in the years ahead

It's looking more and more like another year of pretty clear sailing for prices.

Labor, for example, remains remarkably quiescent. True, more than 500 large contracts involving some 2.4 million workers in private industry will expire or be reopened this year. But all signs point to extremely modest settlements—with such key sectors as trucking, airlines, construction, apparel, and food likely to ratify pacts under the expected 4-5% general inflation rate. Even the more strident rubber, auto, and electrical unions will be hard pressed to reach this 4-5% figure.

This lag in union pay *vis-a-vis* the general inflation rate is unparalleled in recent history. It would certainly seem to suggest reduced wage cost pressure on prices in the quarters immediately ahead, especially if worker productivity rises another percentage point or so.

The continuing strong dollar also has to be considered a major anti-inflationary factor. Not only does our high-valued currency make imported goods cheaper, but it also acts as a restraint on domestic producers who might otherwise be tempted to post significant increases.

Even moderate decline in the dollar (which could be as much as 10%, some say) is not likely to change things very much over the current year. Reason: It would take 6-12 months for any such decline to start showing up in the inflation rate.

Even then the overall impact might turn out to be quite small. Foreign producers have not reduced their U.S. prices to anywhere near the levels suggested by the 40% run-up in the value of the dollar over the last three years. U.S. import prices over this same period have only gone down about 10%.

Implication: When the dollar does fall, overseas producers will have plenty of leeway to reduce their home currency prices—and, at least, partially offset the inflationary impact here in the U.S.

There are, of course, other price-curbing factors at work such as excess capacity, less-than-ebullient demand, shakey energy tags, and steady-to-slightly lower borrowing costs. It is not surprising that virtually every economist worth his salt is now predicting another year of price moderation.

One survey of 26 top business analysts puts the inflation rate (fourth quarter 1984 to fourth quarter 1985, GNP basis) at only 4.5%. Only two of these experts puts the increase in the 6% or higher range.

These estimates are being seconded by all the prestigious computer models. Another compilation (this one involving 14 models) suggests a GNP price deflator advance of only 4.3% with only one estimate topping the 6% mark.

The consensus of all these forecasts has to be reassuring.

This expectation of price moderation, incidentally, is more than just a domestic phenomenon. A look at the 1985 forecasts of other industrial nations—based on a new OECD estimate—provides the cheery details: Japan (2.75%), West Germany (2%), France (6%), Britain (5.5%), Italy (8.25%), and Canada (4%).

Material handling equipment

Demand for material handling equipment will slow down soon.

At least that's how Frost & Sullivan sees things developing. Right now analysts at the New York-based research firm are projecting only a 7% real (inflation adjusted) advance for 1985—far under the estimated 37% jump of last year. Also, the gains over the subsequent three years (1986-88) are expected to be in the even more moderate range of 2-3% per year.

A modest amount of inflation in equipment prices is also anticipated, with 8% expected this year slowly decelerating to about 5% by 1988.

Current dollar and physical volume forecasts for 19 specific lines on a year-to-year basis show a wide variation, with newer types of equipment expected to capture a larger share of the market.

Thus while such established lines as industrial trucks will rise only 44% in real terms over the 1983-84 period, some king-sized gains are seen over the same time for mini-load AS/RS (159%), unit load AGVs (223%), bar code readers (287%), and roll-formed-track monorails (337%).

Foreign competition will also play a key role in some areas. The Japanese, for example, have captured an estimated 25-30% of the internal combustion engine forklift truck market. This has caused a major upheaval in the domestic industry, as U.S. manufacturers source these items worldwide.

Other interesting findings:

- **Most important recent developments,** as seen by users—robots (25%), microprocessor and computer controls (23%), forklift improvements (18%), AGVs (7%), narrow aisle equipment (7%), and bar code improvements (7%).
- **Most pressing needs for the future,** as seen by users—dependability, reliability, and maintainability (30%), cost containment (22%), computerization (15%), and robots (9%).

Construction materials

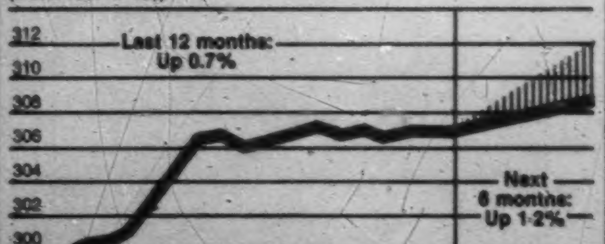
CURRENT SITUATION: The housing slowdown is having a significant impact on construction material tags. Prices have been marking time—in sharp contrast to the more than 3% annual rate of rise noted in early 1984. Other factors contributing to price restraint: (1) strong competitive pressures, (2) falling energy costs, and (3) rising imports in key areas such as lumber, cement, and steel.

DEMAND: Construction projections point to a continued leveling off. Total housing starts, for example, will dip into the 1.55-1.60 million unit range—down from 1.75 million last year. Impact will be felt on gypsum and on softwood lumber where last year's 7.5% shipment increase will give way to a 3% decline. Portland cement is expected to rise only 2-3%—well under last year's 15% advance. Even structural steel will find it hard to top last year's gains.

SUPPLY: It looks like clear sailing for 1985. This is certainly true for lumber where declining demand, reluctance to curb mill output, and Canadian imports are holding supplies steady. Fears of cement shortages have all but disappeared because of new, big plants and strong imports. The import factor is also causing a fabricated steel glut. Supplies of plastics, glass, and insulation materials are more than ample. **It's hard to find any construction material that's likely to be tight.**

PRICE OUTLOOK: Moderation will continue—with perhaps only a 1-2% average increase seen for the next six months. On a product-by-product basis there could even be a few fractional declines, most notable in plastic products and glass. Oversupply should keep lumber at present levels, and gypsum should stay steady too. Structural steel won't move up more than 5% this year. **Upshot: Construction costs for the year are likely to be up less than 4%.**

Construction materials
(Index: 1967 = 100)



Coal

Press for price concessions when renewing long-term contracts. Signs of easiness: (1) Spot tags on metallurgical coal run as much as $3/ton under year-ago levels, (2) inventories remain far too high, and (3) production plans point to a 1% output decline this year as stocks are drawn down and consumption gains slow. On the latter score, only about a 2.3% increase is anticipated for 1985—less than half last year's big 5.9% advance.

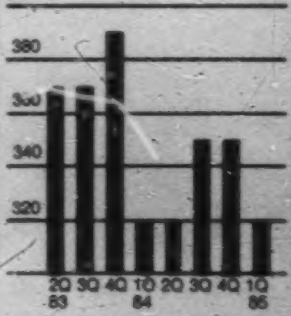
Aluminum

There's still no sign of a price pickup—with market quotes holding in the low 50¢/lb range. One reason: inventories, despite announced production cutbacks, are still on the rise and now run 30-40% ahead of a year ago. To be sure, these output cuts will eventually have an impact. But don't expect miracles. Demand won't be all that robust with domestic shipments in 1985 lucky to eke out even a fractional gain. Best bet then: a slow price rise—with ingot moving up into the 60¢/lb range by spring.

Paper

Uncoated white paper continues to be highly competitive. More important—linerboard quotes have dropped back to $320/ton—a significant 8.5% below the previously prevailing $350/ton level. Behind the softening: some easing off in domestic demand and reduced exports due to the strong dollar. There is also some feeling among industry observers that operating rates for linerboard aren't nearly as high as suggested by API figures. In any case, look for these quotes to remain easy into early spring.

Linerboard
($/ton)



Petrochemicals

Late 1984 softness is spilling over into 1985, reflecting a combination of excess capacity, imports, just so-so demand, and lower feedstock costs. A current sampling of market tags tells the story: styrene (25.5-26¢/lb), polymer grade propylene (18.5-19¢/lb), ethylene (18.5-19¢/lb), and benzene ($1.17/gallon). Nor is any turnaround anticipated. Indeed, prices could well edge even lower if crude oil tags continue to soften.

ABS plastics

There's little change noted in the pipe grade which continues to move in the

PW PREDICTS

Steel mill products

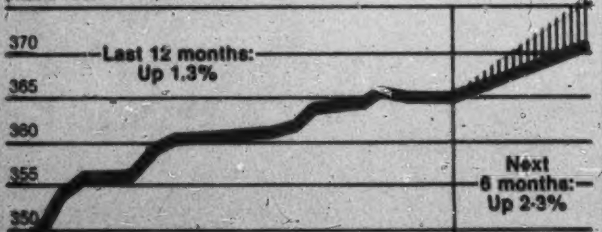
CURRENT SITUATION: Prices remain quite weak as fierce competition among the major mills holds steel at bargain-basement levels. An added depressant: huge tonnages of foreign steel in U.S. warehouses. Prices during the last half of 1984 dropped 15% in many spot steel markets. **The recent poor domestic shipment rate hasn't helped matters either.** The industry shipped only 17 million tons in the last quarter of 1984 and only 17.5-18 million tons are expected to clear the market in the current quarter.

DEMAND: Somewhat better results are seen as the year wears on. Requirements for freight cars, machinery, oil drilling equipment, and industrial construction are expected to increase, causing a small consumption gain. And there is hope that voluntary import curbs will drop the overseas market share from 25% to near 21%. **The industry is now expecting to ship anywhere from 76 to 80 million tons**—slightly above the 73 million moved in 1984.

SUPPLY: Narrowing leadtimes and operating rates which averaged less than 70% in 1984 point to easy supply. Raw steel making capacity, currently at about 135 million tons, is expected to drop further over the next few years despite increases in mini-mill potential. Combine this supply shrinkage with slowly increasing demand—and it points to better market balance.

PRICE OUTLOOK: Figure on at least another 3-6 months of little change—although official lists could edge up a few percentage points as mills lay the groundwork for future boosts. This does not rule out continuing heavy near-term discounting in many product lines. Cold rolled steel, for example, is currently available for less than $400/ton—more than $100/ton under list. **Products likely to be shaded over the next few months include plates, large structurals, and tubular products.**

Steel mill product prices
(Index: 1967 = 100)



65-70¢/lb range—not all that much under the official 72¢/lb list. But a 3-4% increase has recently been posted for refrigerator applications. And it's not inconceivable that automotive grades might also move up a bit after midyear when new 1986 models go into production. In any event, the resin should rack up a fair-sized 6% demand gain in 1985 (on top of last year's big 18% spurt)—enough to push operating rates into the mid-70s.

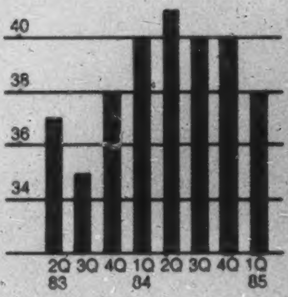
Computers

Grey market transactions (sales by unauthorized dealers who buy unwanted machines from authorized dealers) are making for good bargains. Example: IBM PCs are now said to be available at prices ranging from 5% to 40% under suggested producer lists. Good bargains loom ahead on home computers, too, with the liquidation of Coleco's Adam line expected to bring quotes on these discontinued models down to as low as $200.

Polypropylene

Declining monomer tags have knocked another few cents off the going per lb quote, with purchases being made in the low 34-38¢/lb range for the key homopolymer grade—some 10¢/lb under the prevailing list. Adding to the weakness has been the sale of large quantities of the resin at prices under the prevailing market level. Demand, on the other hand, has been holding up well—with a 5% increase now seen for 1985 on top of 1984's big 8% advance. This in turn should keep operating rates in the upper 80s, high enough to make for some modest firming later on in the year.

Polypropylene (homopolymer grade)
(Mkt. price—¢/lb.)



Abrasives

Count on ample supplies and relatively modest price increases—both for grinding wheels and coated abrasive products. So advises a top executive of Norton Co. of Worcester, MA. On the supply side, he says that leadtimes for custom-made orders will remain at fourth quarter 1984 levels. He also notes that imports will continue to hold about 10% of the market, adding that it's the combination of these competitive pressures and manufacturing cost reductions that will keep price hikes down. One big growth area will be in grinding wheels with cubic boron nitride (CBN). Creep feed grinding will also show good progress.

PW PREDICTS

Crude oil

There's a good chance that prices may fall (perhaps as much as $3/barrel) over the next 3-6 months—bringing the going global quote to as low as $26/barrel. Much depends on how OPEC's new monitoring system works. Odds are that many of the nations involved won't abide by set quotas—especially since there are no penalties for cheating. Bottom line: If crude does fall, prices for gasoline, home heating oil, residual fuel, and other refined products are bound to follow suit, putting new downward pressure on all energy tags.

Semiconductors

The big semiconductor industry is taking a breather after a record-breaking 1984.

As shown in the chart below, the book-to-bill ratio (measurement of orders relative to shipments) has dropped precipitously in recent months—falling to 0.61 at latest report—a far cry from the 1.5 peak of early last year.

One result: The 1985 outlook isn't nearly as bright as it seemed just a few short months ago. As recently as September 1984, the Semiconductor Industry Association was talking in terms of a 21% sales gain for the new year, but now the group seems reconciled to little more than a 10% advance. And even that may be a bit optimistic.

One thing is sure, it is taking a toll on prices. One industry observer, for example, feels that when the dust finally settles on 1985, overall semiconductor tags could fall off as much as 8-10%.

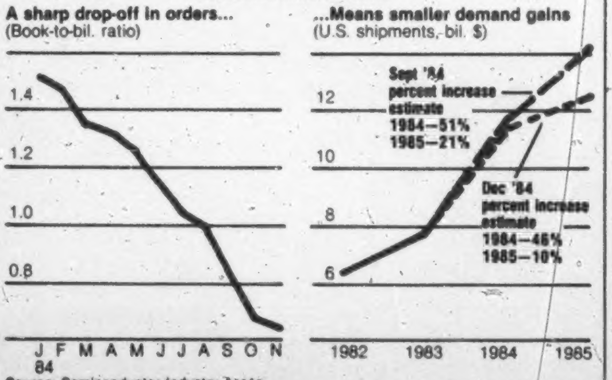
The above averages do not tell the whole story. In the highly competitive computer memory chip sector, 1985 averages could be off as much as 20-30%—on top of the 40-50% declines noted in some of these product lines last year.

Slackening demand is only part of the price story. Equally significant has been the big buildup in production capacity which was made on the assumption that the recent boom would continue into 1985.

Worldwide capital investment amounted to one fourth of the total revenues last year with the Japanese still upping their outlays. It's not surprising that several industry watchers now predict that semiconductor capacity will continue to outstrip demand for at least another 12-18 months.

In short, a buyers' market is here to stay for a while.

Semiconductors



Source: Semiconductor Industry Assoc.

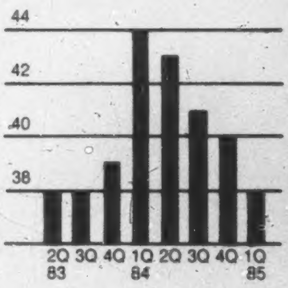
Zinc

Softness persists—with producers in recent days offering 2¢/lb or more off the 45¢/lb HG list level and foreigners offering consignment with 60-90 days credit. On a more bullish note, there has been a modest reduction in Free World stocks. Production cutbacks, particularly in Europe, have also tended to bring supply and demand back into balance. Indeed, some modest price increases may be possible if the Soviets and Chinese step up their buying, though any climb back to the 53¢/lb level prevailing as recently as last spring still seems remote.

Polystyrene

Credit recent declines in key feedstocks (benzene and styrene monomer) for new softness which has brought market prices down into the 35-38¢/lb range for the general purpose/crystal grade. A seasonal drop-off in demand may also have played a role in recent easiness which leaves quotes far under the official 48¢/lb list. The current year's demand gain isn't likely to be all that robust either with only about a 3% advance anticipated. This, in turn, implies only about a 66% operating rate—not nearly high enough to spark any major price boost.

Polystyrene (general purpose)
(Mkt. price—¢/lb.)



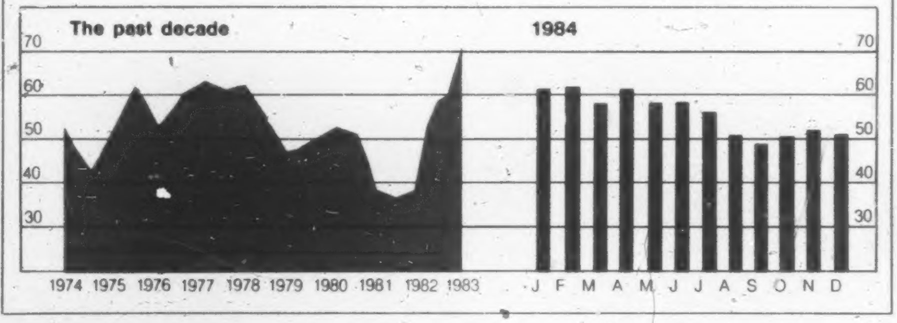
Copper

While tags continue to back and fill in the low 60s range, metalmen are still betting on a modest rally by spring or early summer. Positive factors cited include (1) the likely maintenance of 1984's consumption gains, (2) some pickup in both Chinese and Japanese buying, and (3) big reductions in LME and COMEX stocks. On the latter score, if the drawdown continues, global holdings could again be approaching the normal 9-9.5 week level by late spring. If so, then prices could well edge up into the 70¢/lb range. But that's about it.

BUSINESS DATATRAK

NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance)



KEY ECONOMIC TRENDS

Near term outlook is positive

Perhaps not all the news out of Washington these days is bullish. But for the most part, business indicators still remain positive, just about ruling out any near-term slide.

On the plus side, for example, there has recently been a fair-sized increase in new orders as well as some declines in critical money rates. Note, too, that the widely monitored NAPM Business Barometer (see chart) still remains above the neutral 50 mark, but well under the near 60 level of early last year.

The fall in interest rates is particularly significant. The drop in the prime borrowing rate to under 11% (see chart)—more than two full points under last summer's high—can't be shrugged off. A decline of this size will almost certainly give business a badly needed shot in the arm.

To be sure, most financial analysts do not see rates dropping much further—not in light of a $200 billion-plus budget deficit. More significantly, they see the decline as proof that the Fed is now a lot more accommodating than it was a few quarters back.

Put another way: The nation's money managers have given a loud and clear signal that they are not going to do anything that might abort the current business upturn.

The improved borrowing outlook is already beginning to have some positive impact on the housing market. Recent 1985 forecasts calling for only 1.5-1.6 million housing starts may have been a bit on the conservative side.

Credit the change here to failing mortgage rates. The average fixed rate mortgage was down to 13.1% at latest report (vs. 13.4% a year ago). And there is a good possibility this figure could fall as low as 12-12.5% by late spring, thereby making it possible for many more families to think about buying a new home.

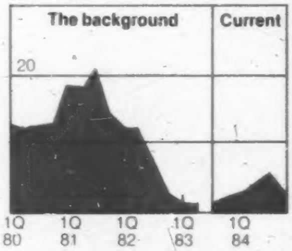
Another fairly encouraging sign has been the leveling off of consumer buying plans after a recent sharp decline (see chart). In the words of Fabian Linden, the Conference Board's economist in charge of compiling these figures: "The current level of confidence suggests that a good deal of vitality is still left in the current business recovery."

This confidence, incidentally is spilling over into the bellwether auto sector. Most Detroit executives, for example, are still talking in terms of equalling last year's good performance and have raised first quarter output to the highest level since 1979.

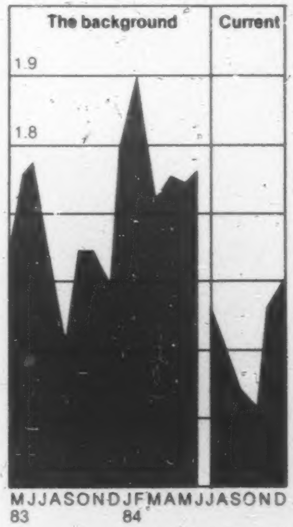
Also, there still seems to be some life left in capital investment. The latest Commerce Department plant and equipment survey tells the story here. As of a few weeks ago, its forecast was pointing to a respectable 8.4% rise in 1985, with only one or two percentage points of this

Leading indicators

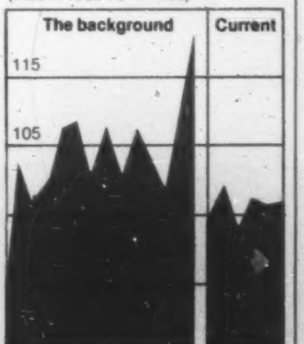
1. Prime rate
(Percent)



2. Housing permits
(Mil. of units, seas. adj. annual rate)



3. Consumer buying plans
(Index: 1969-70 = 100)



attributable to high prices.

To sum up: There is still a lot of forward momentum left. Maybe not as much as last year, but certainly enough to keep GNP and industrial production in the plus column for at least another 6-9 months.

Top execs are less optimistic

The nation's top businessmen aren't as optimistic as they were last year. Evidence for this is fairly conclusive:

- Dun and Bradstreet's Sales Optimism Index, based on replies from some 1,500 corporate leaders, has dipped to 68, marking the second straight quarterly decline in this key yardstick after seven consecutive advances.
- The Conference Board's Confidence Index, based on an equally large sample of chief executives, has slipped to 57 from the 61 reading of the previous quarter.

Even with these drops, both measures are still at very high levels (see chart)—there is little evidence to suggest any imminent downturn. But it does point to a change in thinking on the part of the people who make many of today's key economic decisions.

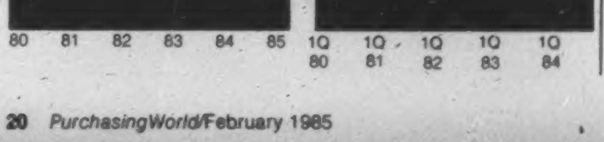
As Lora S. Collins, the Conference Board's Director of Business Conditions Analysis, puts it: "With expansion now well established, business leaders are less inclined than they were to report that business conditions are improving. Current readings simply reflect the maturation of this economic expansion."

A similar view is taken by Joseph W. Duncan, D & B's corporate economist, who notes that "The economic expansion has slowed to a more moderate pace following very strong gains made in the first three quarters of last year. The results of our current survey clearly reflect that fact."

Among other things, the shift in economic thinking has also reduced business hopes of raising prices. Thus only 42% of D & B respondents now talk in terms of prices rising above the levels of a year ago.

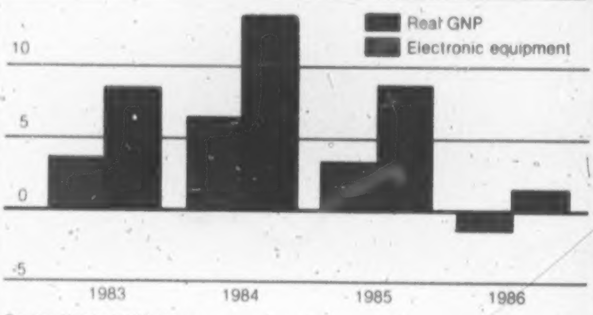
Similar caution is seen in inventories where today's 40% who are planning on increasing inventories compares to the 54% reading of just six months ago.

Business confidence slacking off— but to still high levels



Electronic equipment: still a growth market

(Percent change)



Source: Henderson Ventures

Another respectable year for electronics

The electronics equipment industry seems to be headed for another good year. Although not quite as good as 1984 when overall sales (in real terms) advanced a heady 13%.

So say analysts at Henderson Ventures, a California-based consulting firm. They see a 9% increase for 1985—not much under last year's big 13% advance, and still more than double the 3.6% increase in real GNP seen over this same period.

Indeed, even in 1986 (when a fractional decline in GNP is projected), the electronics industry should still be able to eke out about a 2% real gain.

These current dollar and real estimates also suggest continued moderation in prices—a less than 5% price increase is projected for the overall electronic equipment market for 1985.

The new study also divides the industry into five categories (by current dollar output only). The 1985 estimates on this basis: communications (16.2%), computer and office (13.5%), industrial and instrument (12.3%), military (15.9%), consumer (5.5%).

Figures for electronic components indicate some sharp deceleration from last year's big gains.

For semiconductors, for example, last year's 37.6% jump in consumption is expected to dwindle to a 13.7% for 1985. Even that might be optimistic. A similar sharp deceleration is seen for passive components where last year's 20.2% advance is expected to drop to 11.6%.

Components imports will become increasingly important this year. The import share of the semiconductor market is expected to top the 50% mark this year—well above the 42% and 48% penetration figures of 1983 and 1984.

CURRENT PRICES

Energy slides another point, metals soften

Industrial prices fell again this past month as energy and metals continue soft.

Year-to-year comparisons are almost as impressive. Over the last 12 months, for example, this bellwether yardstick of inflationary pressures moved up only 1.4%.

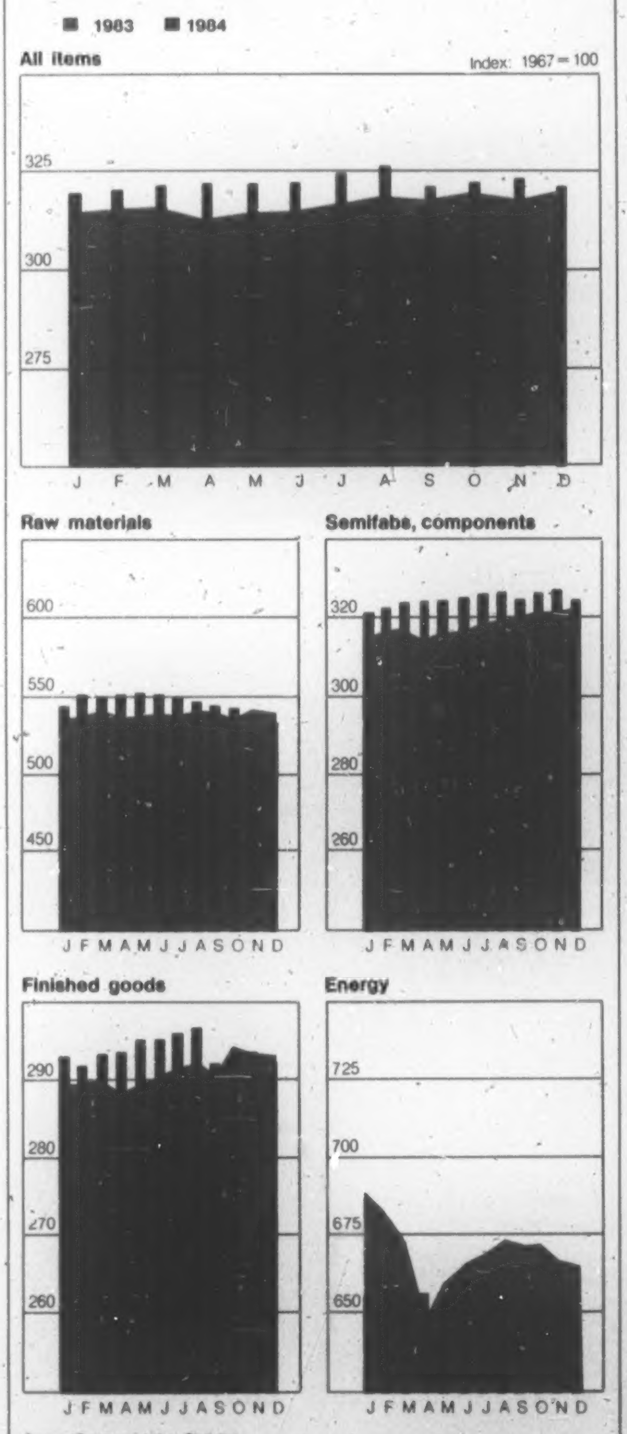
This good news, reported by the Bureau of Labor Statistics, is largely due to another decline in the energy sector where overall averages fell a full percentage point over the past month, with the year-to-year decline put at an even higher 1.5%.

Moving down during the month were crude petroleum, gasoline, home heating oil, residual fuel oil,

This month's breakdown

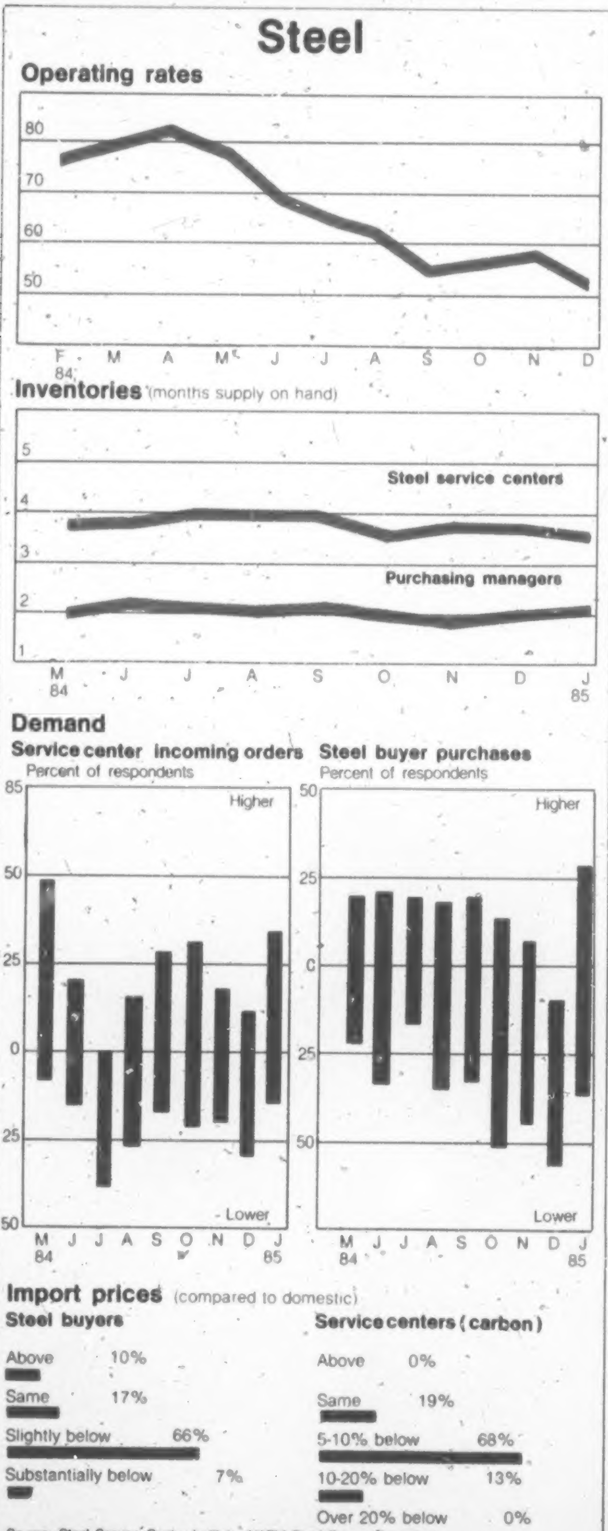
	Latest level (Dec.)	% change from: Month ago	% change from: Year ago
Bearings	344.5	−0.3	3.3
Bolts, nuts, etc	280.0	1.1	3.2
Chemicals, inorganic	297.3	0.3	2.7
Chemicals, organic	351.9	0.1	−7.0
Concrete products	312.1	0.2	2.6
Corrugated cartons	281.4	0.1	12.6
Cutting tools, small	284.8	0.2	2.2
Electric lamps (bulbs)	341.6	0.3	3.1
Electronic components	196.9	0.1	4.7
Fans and blowers	351.5	0.0	4.5
Foundry and forge products	363.1	0.2	2.9
Fuel oil (residual)	1129.8	−0.2	1.8
Furniture, commercial	299.8	−0.4	3.6
Gasoline	554.5	−1.7	−5.5
Glass, flat	218.1	0.3	−5.1
Glass containers	364.1	−0.2	3.9
Gypsum products	329.3	−0.9	2.1
Hand tools	365.5	0.2	3.7
Hand tools, power driven	226.6	0.1	1.8
Industrial furnaces	380.8	−0.3	3.1
Integrating and measuring instruments	230.8	−0.1	3.2
Internal combustion engines	344.7	−0.9	2.5
Lubricating oil	794.5	0.0	0.8
Lumber millwork	312.5	0.9	1.3
Material handling equipment	292.1	0.2	1.8
Metal containers	357.5	0.0	5.1
Metal mill shapes (nonferrous)	315.3	−0.7	−0.2
Metal tanks	306.2	0.0	0.7
Motors and generators	342.2	0.1	1.8
Motor trucks	289.6	−0.2	3.4
Office and store equipment	153.0	−0.6	−1.0
Paperboard	292.4	−0.3	12.1
Paper boxes and shipping containers	272.6	−0.1	8.1
Paper office supplies	243.5	0.0	7.1
Paint	277.3	0.1	4.7
Plastic resins	307.2	−0.5	1.9
Precision measuring tools	254.9	0.0	4.3
Pumps and compressors	352.2	−0.6	1.6
Refractories	366.6	0.0	3.8
Rubber belts and belting	344.5	−0.6	2.7
Scales and balances	232.8	1.1	2.1
Steel products	365.1	−0.1	2.3
Switchgear	274.7	−0.1	0.5
Textiles, synthetic fibers	157.4	−0.1	−0.4
Textiles, gray fabrics	153.7	−0.6	1.1
Tires and tubes	243.7	−0.1	0.6
Transformers and power regulators	229.3	0.2	3.1
Welding equipment	285.1	0.2	2.1
Wire and cable	201.2	−0.1	−0.2

Industrial prices



Source: Bureau of Labor Statistics

BUSINESS DATATRAK



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

electric power, liquid petroleum gas, and natural gas—with the latter off for the fourth consecutive month.

But energy isn't the only weak spot these days. Most metals have been soft. Declines have been noted for aluminum, copper, lead, cobalt, gold, and silver. Steel has not been very strong either, with plenty of discounts available. Even scrap metals have edged lower.

Other declines have been reported in plastic resins, plastic parts and components, wood pulp, textile fabrics, and crude rubber. But some of these were offset by increases in raw cotton, rubber hose, autos, fasteners, and bulbs.

A similar mixed picture is noted in construction materials. Increases in concrete products, lumber millwork, and asphalt felts and coatings have been offset by declines in softwood lumber, plywood, and gypsum products.

But on a slightly more inflationary note, capital equipment quotes moved up 0.2% for the second consecutive month. Even so, the increase here over the past year comes to only a fraction over 2%.

Most analysts remain optimistic about the near-term prognosis for industrial averages in general. Citing expected further drops in the energy sphere, they feel the overall tags over the first six months of 1985 will move up only about 1-2% at an annual rate—thus assuring a few more quarters of relatively inflation-free purchasing.

STEEL SCENE

Buyers turning positive in surveys

Steel demand may still be in the doldrums, but buyers and service centers now think they see some light at the end of the tunnel.

At least that's what they are telling survey takers these days. Results of the latest NAPM Steel Buyer Committee report finds that 31% are expecting to increase buying over the next three months. That's the highest percentage since last March.

The gap between those seeing increases (31%) and those anticipating declines (38%) has narrowed, with the latest seven percentage point difference well under the 32 point and 14 point gaps of November and December.

An even rosier picture is suggested by distributors responding to the latest Steel Service Center Institute (SSCI) survey. Specifically, those anticipating an increase in incoming orders (34%) actually outnumber those expecting decreases (16%) by a better than 2 to 1 margin.

True, steel buyers' stocks have climbed a bit. But the rise here has been modest. Indeed the latest 2.15-month supply reading still leaves totals under mid-1984 highs.

More important, both service centers and buyers mean to keep their holdings down. Again, survey results tell the story. Thus 54% of queried distributors hope to bring supplies down (vs only 7% contemplating an increase). And on the buyer front the 41% planning on near-term decreases compares almost as favorably to the 7% who are looking for an increase.

Reasons for this "keep-'em-lean" strategy could be faster deliveries and reduced fears of bottlenecks. Not one single item is seen as a problem by service centers. And buyers agree—with only one survey respondent voicing concern, and then in only one product, namely coated sheet.

All this is in sharp contrast to last summer when concern was expressed over hot-rolled, cold-rolled, and coated sheet.

On the other hand, talk about import restraints is forcing some reappraisal of sourcing. Thus some 26% of the centers say they will be less dependent on foreign steel—the biggest such percentage (except for one month) in more than two years.

Once again buyers agree, with 24% talking about less dependency. In contrast, only 14% say they still plan on to increase imports.

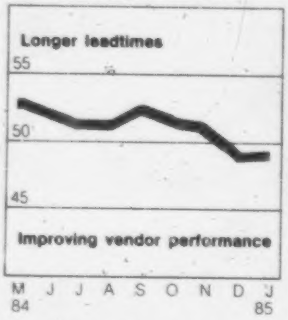
Another reason for less emphasis on imports, aside from quota restraints, could be that bargains are a bit harder to find. Specifically, 66% of buyers report lower import prices (*vis-a-vis* comparable domestic products)—a signficant drop from the 82% figure of just a month earlier.

Service centers note a similar trend. For carbon steel, 81% report lower foreign tags—a 12% drop from the previous month. And for stainless, the latest 81% price advantage reading compares to the 87% figure of just one month earlier.

Monthly procurement status report

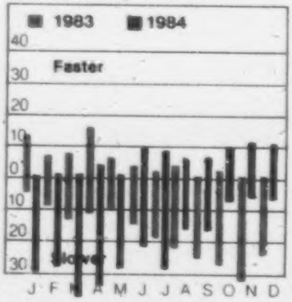
Leadtime index

A 'diffusion' index based on 158 key commodities. Above '50' indicates a tendency for leadtimes to stretch out. Below '50' suggests improving vendor performance.

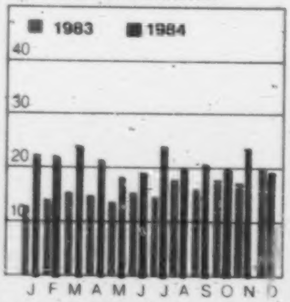


Delivery performance

Percent reporting deliveries

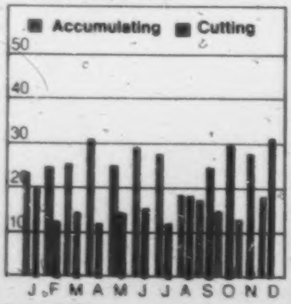


Forward commitments



Inventory strategy

Percent of respondents



Source: NAPM

PROCUREMENT STATUS

Another easy month ahead for purchasors

The evidence is mounting in support of another month of problem-free purchasing:

- **Prices:** For the first time in nearly two years the number of NAPM survey committee buyers reporting lower tags (13%) now tops those reporting higher ones (12%).
- **Leadtimes:** The trend toward gradual shrinkage continues—***Purchasing-World's*** exclusive leadtime index (at 49) remains below the neutral 50 mark for the third straight month.
- **Delivery speed:** Also for the third month in a row: more PMs note faster (11%) than slower (6%) deliveries.
- **Inventory retrenchment:** A basically "no sweat" situation is prompting more and more cuts. At latest report some 32% of NAPM survey committee members were paring stocks—compared to only 18% who were adding.
- **Forward commitments:** These continue to shrink in the key production material sector as only 19% commit 90 days or more in advance (vs 24% a month earlier). Nearly one out of five now say that they are buying on a hand-to-mouth basis.
- **Shortages:** They are virtually non-existent except for spotty mention of integrated circuits. Even this problem should disappear soon as recent declines in electronic component ordering continue.

The continuing low overall factory operating rate is perhaps the most reassuring sign of all. The average has been mired in the comfortably low 81-82% range for months now, and it is expected to stay there through spring and summer as small production increases are effectively offset by a steady upcreep in new capacity additions.

Leadtimes and availability

Chicago: Polyethylene coated solid board is down a bit (to 9-13 weeks). So are common process stearates (to ½-1). But PVC resins have stretched to 2-4. Ditto, mill supplies. Most other MRO items remain unchanged: electrical materials (3-4), valves (2-3), and motors (2-3).

Cleveland: Small offsetting changes here. Cold finish aluminum is down (to 12) and coil coating paint is out fractionally (to 5-6). Other leadtimes: folding boxes (4), 2-ply fiber drums (2), polyethylene and PVC (3-4), glassines and greaseproof papers (4-5), and lumber (3).

Los Angeles: Pretty much the status quo here with these typical leads (in weeks): electro-mechanical components (4-6), custom storage tanks (5-6), galvanized steel (8-10), copper tubing (5-6), copper fittings (3-5), grey iron castings (7-8), brass castings (8-10), paint (4), and printed circuit boards (8).

BUSINESS DATATRAK

Houston: Sluggish oil activity is behind relatively low leads which shape up as follows: high pressure heat exchangers (26-34), MRO items (0-3), electronic components (6-8), domestic drilling pipe (12), nonferrous metals (0-2), structural steel (13-21), forgings (5-7), electrical items (8), and air compressors (4-6).

Philadelphia: Standard reinforced tape has come to only one week. Edging out a bit are chemicals for foam (1), and wooden pallets (1-2). Tall oil fatty acids remain in short supply (6-8)—and there's little relief anticipated. Steel, fasteners, and corrugated cartons remain unchanged.

Pittsburgh: Silicon alloying material has come in a bit (to 3 weeks). No change posted for other alloys. Ditto for plastic bags (3-4), multiwall bags (6), corrugated and folding boxes (3-4), lumber (3-4), laminating papers (6-9), plastic packaging materials (3-4), steel strapping (2-3), paint (4-5), polyethylene (5), PVC (6).

Leadtimes (in weeks)

	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	9	9	9
C-R Sheet (Chgo)	5	5	5
Plate (Phil)	10	10	10
Plate (Chgo)	2½	2½	2½
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	7	7	7
H-R Bars (Chgo)	3	3	3
Cold-Drawn Bars (Phil)	7	7	7
Galvanized (LA)	14	14	14
Galvanized (Chgo)	6	6	10
Structurals (Chgo)	4½	4½	3½
Structurals (Hous)	17	17	17
Tubing (Phil)	7	7	7
Grey Iron Castings (LA)	7½	7½	5
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	6	6	6
Pipe, Carbon (Hous)	13	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	17	17	17
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	7	7	7
ICs (Linear) (Phil)	17	17	20
Motors (Phil)	15	15	15
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	10	10	20
Relays (Chgo)	15	15	15
Resistors (Chgo)	12	12	14
Resistors, Wirebound (Phil)	10	10	10
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	2	2	2
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	⅛	⅛	⅛
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Napthalene (Chgo)	2	2	2
Paint (LA)	5	5	5
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	3½	3½	3½
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	3	3	3
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	3	2½	3
PVC Resin (Pgh)	6	6	6
Titanium Dioxide (LA)	1	1	1

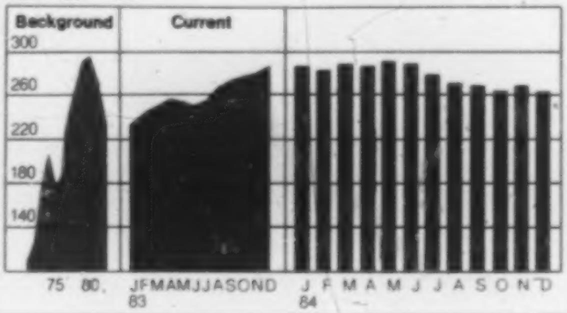
	Now	Month ago	Six months ago
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	3	3	3
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	6	6	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	11	11	13
Aluminum Plate (Chgo)	14	14	14
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	11	11	13
Brass Castings (LA)	9	9	7
Brass Rods (Chgo)	6	6	10
Brass Sheet (Chgo)	7	7	17
Brass Tube (Chgo)	5	5	9
Copper Fittings (LA)	3½	3½	3½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	5½	5½	5½
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	4	4	4
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	5	5	5
Zinc (Pgh)	2	2	4
MISCELLANEOUS			
Bearings, Domestic (Phil)	22	22	22
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	50	50	48
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	1½	1½	1½
Fasteners (LA)	7	7	7
Fasteners, Std. (Phil)	4	4	2½
Heat Exchangers, Carbon-alloy Steel (Hous)	20	20	20
Heat Exchangers, Hi-pressure (Hous)	31	31	43
Insulation Mat'l. (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	2½	2½	2
Pumps (Hous)	35	35	35
Pumps (LA)	9	9	9
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	17	17	17
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Latest month	261.9
Month before	268.3
Year ago	282.4

Index: 1967 = 100



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	347.00
Steel, structural shapes, Pitts., cwt	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt	25.10	25.10	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	23.95	23.95	17.50
Steel, bars, Pitts., cwt	23.95	23.95	17.50
Steel, bars, C.R., Pitts., cwt	29.25	29.25	26.00
Steel, plates, Pitts., cwt	23.25	23.25	23.25
Steel, plates, H.R., Pitts., cwt	23.25	23.25	23.25
Steel, sheets, C.R., Detroit, cwt	27.10	27.10	27.10
Steel, strip, C.R., Chi., cwt	35.30	35.30	35.30
Steel, basic wire, Pitts., cwt	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.490	0.538	0.760
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb	5.20	5.20	4.95
Brass, red, 85%, [sheet], lb	1.26	1.25	1.22
Brass, yellow, [sheet], lb	1.21	1.20	1.17
Cadmium, ton lots, lb	1.25	1.25	1.25
Copper, electrolytic, wire bars, refd., lb	0.64	0.63	0.68
Copper sheet, over 24 in., lb	1.35	1.34	1.31
Lead, common, N.Y., lb	0.18	0.23	0.25
Magnesium, pig ingot, [99.8%], lb	1.48	1.48	1.43
Mercury, 20 fl. lots, N.Y., fl.	312.00	323.00	315.00
Molybdenum Climax Oxide/bags, lb	4.65	4.65	4.65
Nickel, electrolytic, producer, lb	3.20	3.20	3.20
Platinum, producer, oz	475.00	475.00	475.00
Silver, N.Y., oz	6.13	6.87	8.20
Tin, Straights, N.Y., lb	5.76	6.02	6.25
Zinc, Prime West, East St. Louis, lb	0.45	0.45	0.49
Zinc, die casting alloy, No. 3, lb	0.515	0.515	0.555
PAPER			
Uncoated book #3 offset, ton	850.00	850.00	810.00
Watermarked bond, ton	985.00	985.00	915.00
Gummed sealing tape, carton	16.25	16.25	15.45
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	495.00	495.00	475.00
Wrapping paper, std. distributor cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	320.00	350.00	320.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd	0.397	0.400	0.315
Cotton drill, 1.85, 59", 68x49, N.Y., yd	1.04	1.04	1.02
Cotton middling, 1", N.Y., lb	0.621	0.603	0.694
Printcloth, 48", 80x80, N.Y., spot. yd	0.78	0.78	0.84
Army duck, 37", 13 oz., yd	1.78	1.78	1.79
Blended printcloth, 64", 78x54, yd	0.700	0.700	0.710
20s combed yarns	2.12	2.12	2.14
Wool tops, N.Y., lb	3.60	3.60	3.60
CHEMICALS			
Acrylonitrile, tanks, lb	0.455	0.456	0.430
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	195.00
Benzene, petroleum, tanks, Houston, gal	1.15	1.15	1.41
Caustic soda, 76% solid, drums, carlots, cwt	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb	0.58	0.58	0.58
Formaldehyde, USP, 37% [12% to 15% meth.], tanks, lb	0.106	0.106	0.106
Glycerine, synthetic, tanks, lb.	0.81	0.81	0.81
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.54	0.54	0.45
Naphthalene, crude, tanks, lb	0.22	0.22	0.22
Phthalic anhydride, tanks, lb	0.305	0.305	0.305
Polyethylene resin, low density liner film grade (market price), lb	0.29	0.29	0.42
Polypropylene, homopolymer grade (market price), lb	0.34	0.38	0.40
Polystyrene, general purpose grade (market price) lb	0.35	0.37	0.42
Shellac, bone dry, N.Y., lb	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb	0.35	0.35	0.35
Sulphur, crude, ex-terminal, Tampa, Fla., lt	157.50	162.50	132.50
Sulphuric acid, 66%, commercial, tanks, ton	56.85	56.85	56.35
Titanium dioxide, anatase, reg., carlots lb	0.69	0.69	0.69
Xylene tanks, gal	1.26	1.26	1.35
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	308.75	308.95	311.65
Lumber, 2x2, pine, mbf, cl	288.15	286.15	310.60
Plywood, plyform, ¾", msf, cl	572.60	573.05	551.20
Plywood, ⅝", msf, cl	377.95	379.15	350.75
Cement, bulk, ton, tl	63.74	63.74	61.78
Sand, ton, cl	6.23	6.23	6.12
Ready-mix concrete, 3,000 psi/cu.yd., 15 cu. yd	47.62	47.62	45.75
Crushed stone, 1½", ton, c	7.47	7.47	7.83
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.79	0.79	0.76
Gypsum sheathing, ½"x1"x8", msf, tl	206.40	206.40	192.50
Brick, common, per thousand, tl	178.03	177.23	171.83
Asphalt paving, AC-20	172.97	172.14	159.64
Concrete sewer pipe, 12", prem. joint, per foot, cl	7.15	7.13	6.79
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl	25.25	26.25	25.75
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	31.00	30.75	31.50
Gasoline, 91 oct., reg., Los Angeles, rack, gal	0.705	0.760	0.810
Gasoline, 94 oct., reg., Chi., tank car, gal	0.674	0.723	0.765
Heating oil, No. 2, Chi., bulk, gal	0.750	0.795	0.835
Heating oil, No. 2, N.Y., bulk, gal	0.808	0.808	0.878
Heavy fuel, PS 400, Los Angeles, rack, bbl	26.50	26.50	26.25
Jet kerosene, gal	0.755	0.768	0.860
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.420	0.425	0.460
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	85.00	81.00	98.00
Steel, No. 1, hvy., dlvd., Chi., ton	78.00	75.00	88.00
Copper, No. 1, East, wholesale buy, dlvd., lb	0.535	0.545	0.585
Copper, No. 2, East, wholesale buy	0.445	0.455	0.495
Brass, red, East, wholesale buy, dlvd., lb	0.495	0.505	0.545
Brass, yellow, East, wholesale buy, dlvd., lb	0.330	0.345	0.315
Alum., old sheet/cast, E., wholesale buy, dlvd., lb	0.335	0.335	0.500
Alum., mixed clip., E., wholesale buy, dlvd., lb	0.355	0.355	0.515
Zinc, old, East, wholesale buy, dlvd., lb	0.160	0.200	0.185
Lead, clean solids, East, wholesale buy, dlvd., lb	0.100	0.120	0.150
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	15.00	15.00	25.00
Paper, old corrug. box, dlr., N.Y., ton	10.00	10.00	21.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb	0.12	0.12	0.11
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb	0.34	0.35	0.33

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

Packaging prices on the rise

Figure on another year of moderately rising prices. That is how the majority of PMs responding to a new nationwide *PurchasingWorld* survey see things developing. But the increases should be generally tolerable, with less than one out of ten surveyed buyers putting the average 1985 advance in the 7% or higher range.

Only one respondent sees a 10% or higher boost—a marked improvement over last year when some of the paper sectors such as corrugated cartons and bags moved up an average of 11% (see chart).

Observes one Midwestern-based packaging buyer: "True we're not going to avoid further increases, but intensifying intra- and inter-industry competition, plus the fact that 1984 was a catch-up year for some vendors, should help us hold any new increases to manageable proportions."

Here is a more detailed rundown of what he and his fellow purchasing executives see developing over the new year:

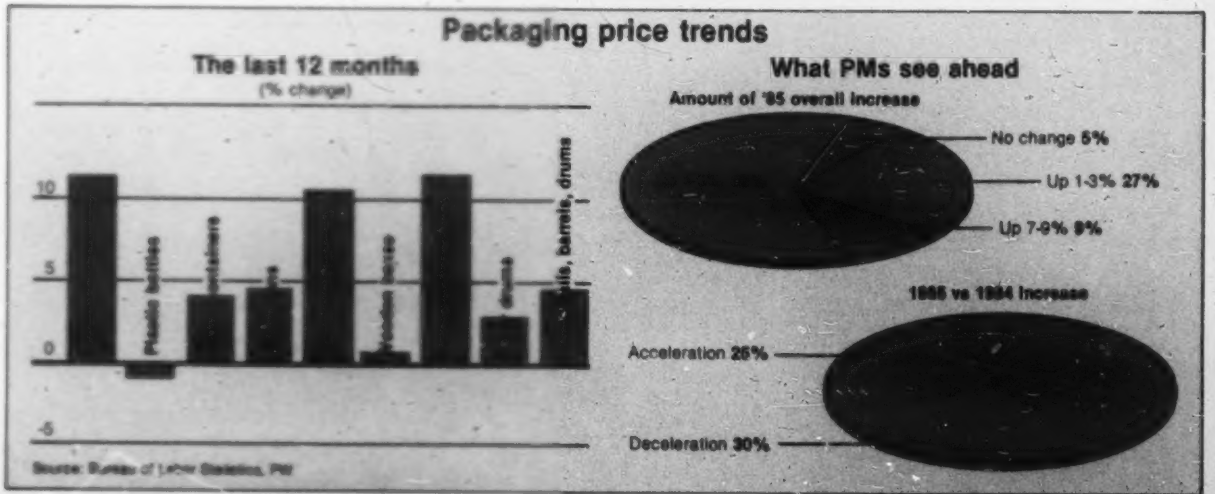
- **Overall price level:** The average 1985 increase is estimated in the 4% or higher range, just about in line with the overall general inflation rate.
- **Prices—1985 vs 1984:** Projected increases represent a fractional improvement over last year when the average hike came to near 5%. The modest slowdown is also confirmed by the fact that 30% of the respondents expect some deceleration—a somewhat greater number than the 25% who feel 1985 price boosts may be bigger than those of last year.
- **Current discounting:** Most respondents seem to agree there is not very much price shading taking place now. On the other hand, some scattered easiness is still being reported in such sectors as plastics, glass, and folding boxes. Corrugated is still pretty firm, though a few buyers say they have been able to water down some of the recently announced boosts.
- **Specific 1985 price hikes:** The range of advances currently anticipated—corrugated (3-8%), folding cartons (3-5%), glass (3-6%), closures (5%), labels (5%), plastic bottles (2-5%), cans (3-7%), and flexible packaging (0-3%).
- **Demand:** A bit of a surprise here, with volume increases expected to equal those of the past year. The average 4.5% advance projected, if it turns out to be anywhere near correct, suggests 1985 may turn out to be a better year than some of the forecasters seem to be indicating.
- **Availability:** Pretty much unanimity here, with an overwhelming 95% anticipating absolutely no problem at all. About the only worries are scattered fears of some leadtime extensions and one or two mentions of corrugated and glass snugness.

But these latter concerns seem to be unfounded. In glass, for example, the NAPM Packaging and Container Committee notes "The overall glass market lacks the strength as the conversion to plastic containers by the liquor industry continues and as beer sales decline." The most recent report concludes that "supply exceeds demand in most areas."

Fears of tightness in corrugated would seem also to be unrealistic, given the recent industry forecasts calling for 1985 shipments of only 284 billion square feet, up just 3.5% from 1984 levels.

Buyers, meantime, continue to explore ways to contain costs. High on the list of strategies are packaging redesign, finding more sources, substitution of other materials, use of lighter gauge materials, and more consolidation of packaging into fewer basic types. On the latter score, E.T. Araco of New Jersey's United Hospital Supply notes that his firm has been able to reduce the number of carton types from 10-20 to only about 4-5 currently.

Perhaps the most effective cost-containing tack is still hard-nosed bargaining—something which is best summed up by James D. Butchart, purchasing and distribution vp at Diamond Glass of Royersford, PA, who says, "We are constantly reevaluating higher priced suppliers, aiming to replace them with lower priced ones where feasible. Our goal: a projected 3% savings." **PW**



Source: Bureau of Labor Statistics, PW

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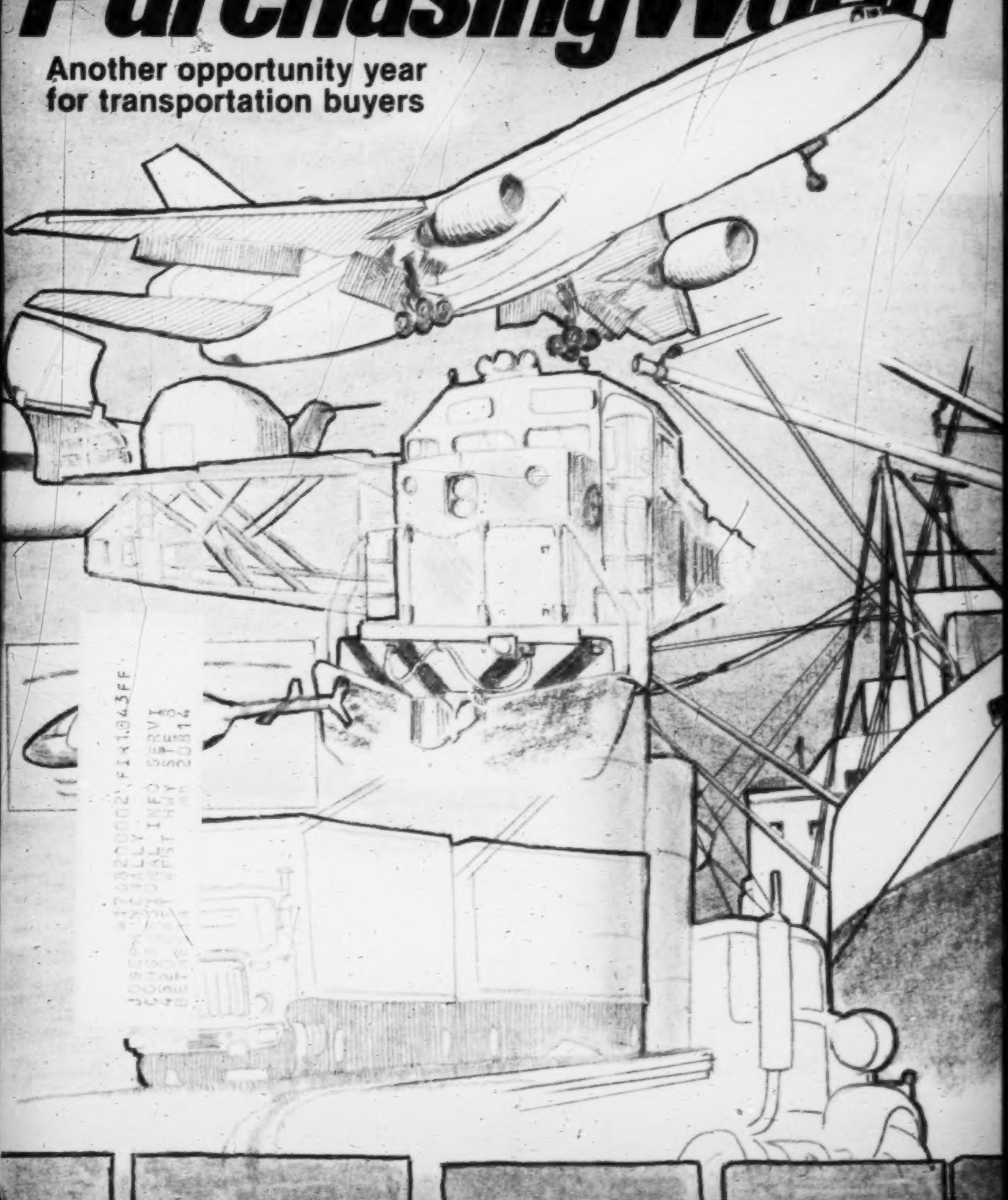
Purchasing World

Another opportunity year for transportation buyers



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Helping you manage the business of buying

Vol. 29 No. 3-March, 1985

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Photo courtesy of Federal Express

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PW PREDICTS

Robert S. Reichard, executive editor

Price news better than 1984

First quarter news is exceeding expectations.

Historically, there is a spurt of price increases in the first few months of the year. This is the time most vendors post their annual increases. This year, most price yardsticks are behaving better than in 1984.

The latest NAPM Business Survey Committee Report shows more buyers noting declines than increases. And the gap is widening: 21% declines vs 13% increases at latest report. This contrasts with 13% lower and 12% higher readings last month.

This good news is supported by purchasing executive replies to a special question on budgeted vs actual price increases. Some 39% said first quarter boosts are under budget, compared to 5% who say they are over.

The picture for transportation is equally optimistic. Wharton Econometrics, the big Philadelphia-based economic consulting firm that supplies *PW* with quarterly rate forecasts, has cut its projection for 1985 by almost half from 6% projected last fall to only 3.4% currently.

The latest government forecasts, contained in the new budget message, tell much the same story. Uncle Sam's economists expect about a 4% increase in the all-inclusive GNP price deflator. And the cost-of-living index is expected to run at 4.3% for the year ending in December.

Other developments are adding to the current optimism. The recent weakening of crude oil tags means that 1985 could see an overall decline in refined petroleum products.

Also, agricultural prices on the farm level continue to fall. By the second quarter they are expected to be down 3% from year-ago levels. This suggests supermarket prices will not rise as much as the 2-5% forecasted by the Department of Agriculture.

Another important trend: better-than-anticipated productivity gains. Latest figures show that 1984 ended up with a bit more than 3% advance—enough to hold the rise in critical unit labor costs to 1%.

Fed chairman Paul Volcker sums it up by saying he isn't ready to declare "total victory" over inflation, but he notes that inflation is currently running about as low as it did at the bottom of the 1981-82 recession and during the early stages of recovery.

In short, there is nothing on the horizon to suggest any quickening of the inflation rate—a remarkable feat given the fact that we are now well into the third year of general business growth. If current patterns continue, overall 1985 price increase projections may well be revised downward again.

32% gain in '84 imports will not be repeated

Look for imports from Western Europe to begin flattening out. True, some additional small increases are still likely. But given the combination of trade curbs, a leveling U.S. dollar, and reduced GNP growth, the gains are likely to be a lot smaller than the huge 32% advance of last year.

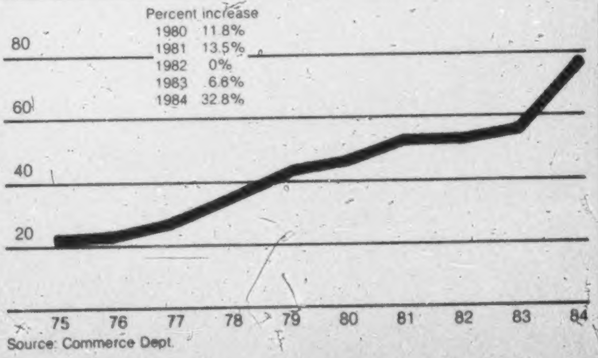
Steel quotas, for one, will certainly have a negative impact on U.S. buyers. In pipe and tube, for example, new Common Market quotas will restrict U.S. sales to only 7.6% of the U.S. market—just about halving 1984's big 14% share. One thing is for sure, incoming totals will be a lot less than the one million ton-plus level of 1984.

Elsewhere in steel, U.S. buyers may have to pay a bit more for stainless sheet and plate as prices in the U.K. increase another 5%. On the other hand, output has been raised so there should be enough to go around, even with improved European demand.

Some boosts have already been noted in silicon, and indications are that they will stick. Bullishness here is caused by very low inventories on the part of both buyers and producers, and by the entry of the Russians into the market on the buyer side.

On a more optimistic note, U.S. buyers should be able to find good buys in the machine tool sector for awhile. Indeed, France's state-backed tool producers are planning a strong sales drive in an effort to counteract Japanese competition. One major producer, Machines Francaises Lourdes, is reporting a big jump in out-of-country sales—second half 1984 tool exports accounted for over 50% of its overall business. Confirming this are reports of big deals with both GE and Westinghouse.

Imports from Western Europe



Source: Commerce Dept.

PW PREDICTS

Chemicals

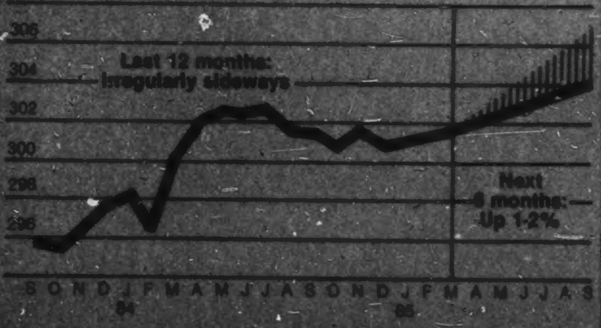
CURRENT SITUATION: The combination of overcapacity, import competition, and low feedstock costs is putting a damper on price hikes—with little or no overall change noted in the all-inclusive chemicals and allied products price average over the past 12 months. Industrial chemical tags are actually 2% below two years ago. Sharp discounts are noted on virtually all commodity resins. However, **inorganic chemical averages have been advancing about 3% over last year.**

DEMAND: Only modest advances are anticipated this year—with total industry output expected to be up only 4%—well under the near 7% increase of 1984. Performances will be uneven—with these output changes seen: benzene (−3%), phenol (+5%), phthalic anhydride (+3%), styrene (−10%), xylene (+2%), ammonia (+5%), caustic soda (+2%), sulphuric acid (+3%), ethylene (no change), propylene (+4%). **Plastic resin production will also show a modest 3-4% increase.**

SUPPLY: It looks like another problem-free year. The industry's overall operating rate is expected to climb only 1% over last year's low 72% as new capacity offsets much of the additional production. These utilization rates are projected for 1985: aniline (70%), benzene (60%), phthalic anhydride (61%), xylene (48%), caustic soda (74%), acetic acid (89%), butadiene (67%), ethylene (79%), methanol (73%), propylene (73%), vinyl chloride (86%), and overall plastic resins (79%).

PRICE OUTLOOK: Buyers will continue to call the signals. In combination with low operating rates there is intensifying overseas competition, and lower costs. The Chemical Manufacturers Association sees only 4-5% increases in labor, material, and energy costs. This all points to another good year for chemical buyers—**with overall averages up 3% for the year.**

Chemicals & products
(Index: 1967 = 100)



Steel

Demand is beginning to pick up a bit. But this improved buying has not affected prices yet. Quotes remain at or near the low levels hit at the end of last year. Reason: There are still plenty of cheap imports floating around—enough to keep average transaction prices some 20-30% under list levels—with flat rolled product discounts running in the 100-125/ton range. This situation is likely to persist through early spring. Beyond that, however, tags should begin to firm—provided that (1) imports drop to 22 million tons (vs 26 million last year) and (2) domestic consumption holds up. But even then the boosts will be modest. Price averages will be hard put to rise by more than 5% by year end.

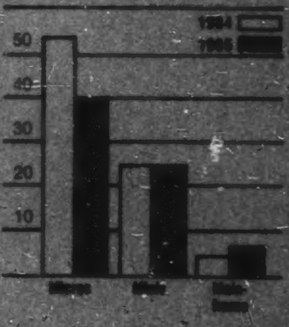
Copper

Markets have edged up from the low 60¢/lb levels of late 1984, and fundamentals are looking a bit better. Thus, (1) inventories are down substantially, especially on the exchange level, (2) much of the 1985 domestic producer metal is now committed, and (3) some snugness is noted in good quality metal. Seasonal demand fluctuations in the consumer sector should help too. And the outlook for 1985 looks good. Usage is likely to rise by as much as 3%. But costs are still a problem—much of the industry will still be operating in the red even if tags do move up into the 70¢/lb by late spring or summer as expected.

Computers

Business is still booming and demand projections for mainframes, minis, and micros are very good. The latter will lead the way—sales this year are expected to reach nearly $14 billion, up almost 40% from 1984. Mini computers won't be far behind—with a 25% jump to $10 billion expected. Also look for continued price declines because of intensifying competition and new technical breakthroughs. Best buys will be in micros as IBM and Apple slug it out for market share. Larger models are heading lower—witness IBM's recent 5% cut in the 308X series.

Computer shipments
(% increase in $)



Machinery and equipment

Price hikes for the first half of 1985 are expected to average out at only 1.5% (3% at annual rate). This is the same level noted in late 1984, and a

PW PREDICTS

Lead

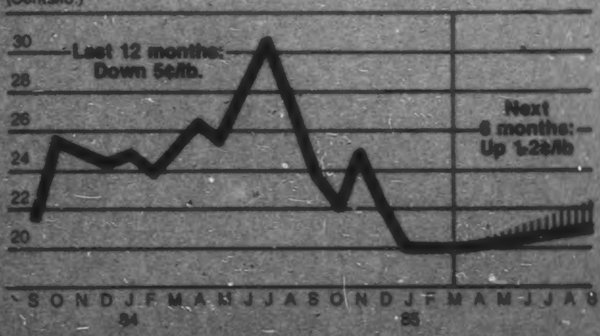
CURRENT SITUATION: The heavy metal is sagging. Prices are now hovering around the low 20¢/lb mark—far from the 28¢/lb high of last fall. Recent **resumption of strike-interrupted U.S. production and low demand have played a major role in the current softness.** Purchases by battery makers (the metal's biggest customer) have been disappointing. Not even recent cold weather has been enough to work off high inventories.

DEMAND: An actual decline could be in the making this year—only about 1.24 million tons expected to be consumed this year—about 2-2.5% under 1984 levels. This reflects the continuing trend toward smaller, longer-lasting batteries and the on-going phaseout of leaded gasoline—something that could cost the metal 60,000 tons in 1985. With these same factors operating over the longer haul, **the average annual increase in consumption over the next five years will be hard pressed to reach the 1% mark.** That would bring total use back up to only 1.26 million tons by 1990, compared to the 1.50 million as recently as 1979.

SUPPLY: Domestic output should take a big jump in 1985—reflecting recent settlement of labor disputes. Primary production could increase 28% to 550 million tons. Secondary output which acted as a buffer against shortages in 1984 could be off 6% (to 590 million tons). Even though imports will drop off some (to just 12% of consumption vs 17% last year), **there will be more than enough lead to go around—with producer inventories rising 75% to 70,000 tons by year end.**

PRICE OUTLOOK: Current bargain-basement levels are likely to persist near-term—as the battery buying season comes to an end. Market fundamentals will also put a lid on tags despite the fact that no one is making money at today's levels.

Producer lead
(Cents/lb.)



bit under the 2% hike noted during the first half of that year. Farm equipment will be especially competitive. Ditto, construction equipment, as a major Japanese firm (Komatsu) strives to double and triple its current 6-7% market penetration. The Japanese also remain active in machine tools—many of their products (especially low-end machining centers and turning machines) are priced well under comparable domestic levels.

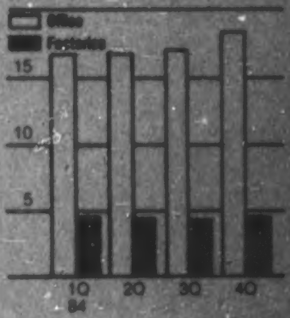
Aluminum

Softness persists despite some sharp domestic production cutbacks. In any event, market ingot remains in the low 50s, and some producers are now aggressively pricing their goods at similar levels. Other signs of weakness: (1) price declines in common alloy sheet, (2) continued import competition, and (3) hefty inventories. It will take at least another six months to get stocks down to normal levels. Price recovery will be slow, with any climb back into the 60¢/lb range at least another quarter or two away.

Office and factory space

There are still plenty of good buys around if vacancies are any indication. A high 14.7% of all downtown area office space is empty, and that figure rises to 18.2% in the suburbs. Sections of the country with exceptionally high office vacancy rates: Columbus (OH), Dallas, Denver, Houston, New Orleans, Oklahoma City, Phoenix, and Sacramento. Factory vacancies also remain high—4.7% on average. Cities with highest rates are Chicago, Houston, Miami, and many cities in California.

Vacancy rates
(Percent)



Energy

Domestic demand gains will slow down to only 2% for 1985—well under half the 5.5% increase for 1984. Reasons: reduced economic growth and continuing conservation. Here's how individual sectors seem to be developing: Oil (1% overall and less than 0.5% for gasoline alone), coal (3-3.5%), nuclear (5-5.5%). Add in OPEC problems and overall price increases are likely to be quite modest. The average energy tab will rise by only 1%—well under the 4% general inflation rate projected for 1985.

Zinc

Some 2¢/lb has been whittled off the price since the beginning of the year. Other signs of softness: (1) low bids at Mint tenders, (2) persistent discounting by European producers, and (3) ample inventories.

Paper

Paper and paper product prices are taking a breather. But some weakness is apparent in several key areas:

- Linerboard: Discounting off list ranges up to $30/ton.
- Uncoated white paper: Excess capacity and imports have dropped tags as much as $50-60/ton under mid-1984 peaks.
- Market pulp: Sharp discounts off the official $500/ton list are reported.

The decline in linerboard, say some analysts, could also put downward pressure on corrugated cartons—or, at least, keep them from rising. This would be in sharp contrast to last year when this key paper product jumped a hefty 12%.

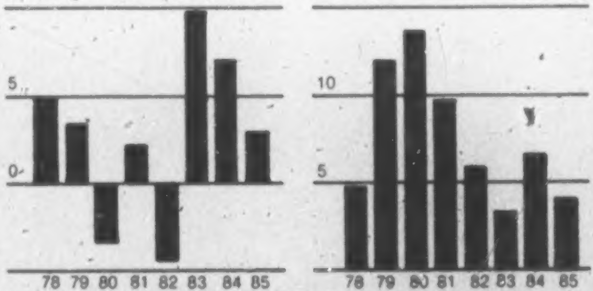
Two other factors calculated to keep prices from getting out of hand: (1) decelerating domestic consumption gains (3% this year vs 7% in 1984) and (2) the strong U.S. dollar which has been inviting imports and cutting down on exports which normally account for 15% of total U.S. production.

Despite this, it would be unrealistic to expect price averages not to rise a bit by the end of this year. Some areas, such as coated papers, are extremely firm and an announced boost in newsprint slated for April is still on.

Also, new capacity, at least on an overall basis, is coming on slowly (only about a 2.3% increase is projected this year). This is slow enough to suggest another year of 95% or higher overall operating rates.

To sum up, throw all the bullish and bearish factors into the hopper and something like a 3% average boost in paper and paper product prices seems likely for the current year. That is pretty much in line with the general inflation rate and a lot less disturbing than last year's hefty 6.7% advance.

Paper markets quiet down



Source: Bureau of Labor Statistics, First Boston Corp.

While it is true that U.S and Free World demand was up strongly in 1984, some slowing is expected—only a 1% advance is seen for the domestic market this year. Rising imports (up 8% last year) could be another drag—offsetting the shutdown of Asarco's Corpus Christi, TX, plant. Upshot: Chances of any major advance are small.

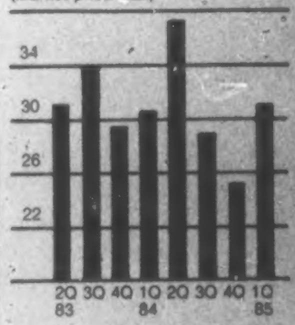
Silver

The precious metal is taking its lumps these days. Close to 30% has been knocked off the going price over the last year. More important, there is little to suggest any rally. 1985 Free World demand will do little more than equal 1984's 374 million ounces, while supply is put at 484 million ounces. That leaves 110 million ounces available for investors—far too much in today's financially unattractive markets. And there is still more production coming on stream. Global increases for 1985 and 1986 are put at 2.5% and 2% respectively. Upshot: a further decline to under $6/oz cannot be ruled out over the next few months.

Polyvinyl chloride

The popular plastic continues to firm—in sharp contrast to persisting softness in other commodity resins. The price for bellwether pipe grade is now at 30-32¢/lb. That's 4-6¢/lb above end levels and about 10¢/lb above the lows of last fall. Several reasons are suggested for the runup—including recent snugness in VM (the basic feedstock) and stronger exports. But another factor is good demand. Last year, for example, shipment advanced a hefty 8%. And preliminary estimates suggest another 4-5% increase for the current year.

PVC (pipe grade)
(Market price/¢/lb.)



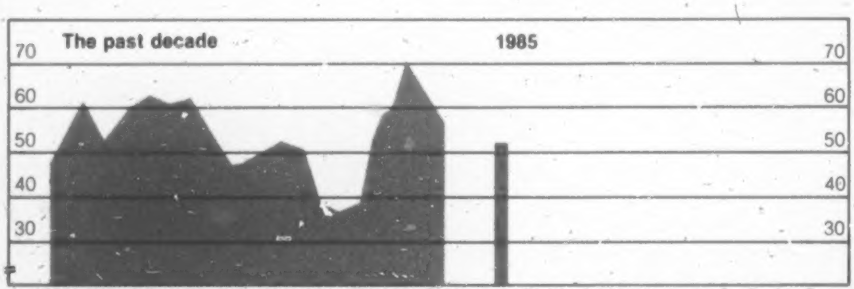
Methanol

Prices, which are down a hefty 40% from their historical highs (to only 36-42¢/gallon), may be about to bottom out. Reasons: Demand has been improving and several older plants have shut down. These factors should help bring supply and demand back into better balance. But any price increase, when it does come, will be modest because the industry is currently operating at only 75% of its potential and imports are still causing problems. One possible market assist is the increased use of methanol as a gasoline additive.

BUSINESS DATATRAK

NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance)



Source: Commerce Dept.

KEY ECONOMIC TRENDS

'85 still looks like a good year

Look for the economy to keep on humming right along—certainly for the next few quarters, and probably for the year.

The evidence on this score is now fairly impressive. For one, the all-inclusive NAPM Business Barometer (see accompanying chart) seems to have turned around after last autumn's weakness. At latest report it is running 2.5% above the neutral 50 mark—the highest level since last July.

Equally encouraging are current inventory readings. Stock sales ratios have been reined in after some modest rise in the early part of last year. Indeed, the correction of late 1984 has, in many cases, brought holdings pretty much back to their all-time lows—thus preparing the way for more gains in output.

The edging down of interest rates has to be considered still another positive factor in the business equation. Lower rates, for example should stimulate capital spending, housing, and auto buying.

In any event, it is becoming increasingly apparent that the Fed now believes it can continue pumping money out at a relatively fast clip without rekindling the inflationary fires.

There is an added plus from lower interest rates, too. Other things being equal, lower borrowing costs should reduce upward pressure on the dollar. This will hopefully prevent further import penetration.

Perhaps the most encouraging sign of all has been the resurgence of consumer confidence. This shows up not only in the new consumer optimism surveys, but also in the actual purchases of goods.

Autos are certainly a case in point. For two consecutive months now, car sales have been clocked in at an annual rate of nearly 11 million. No one expects this pace to continue indefinitely, but the fast start does seem to confirm earlier predictions that the industry will sell 10.5 million vehicles this year.

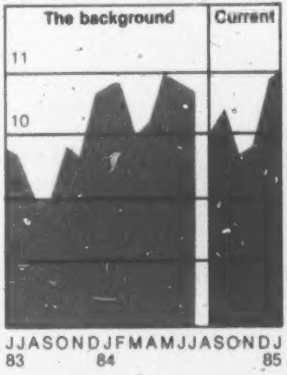
One reason for the booming consumer sales—aside from the confidence factor mentioned above—is the fact the incomes continue to grow. Last year, for example, after-tax incomes advance at an inflation adjusted 6.8% rate. This was the biggest increase in more than a decade. And all signs point to further gains over the next few quarters.

Businessmen also seem more willing to spend. Capital outlay plans still remain strong—fixed business investment in constant dollars is expected to advance 8% this year on top of last year's big 20% jump.

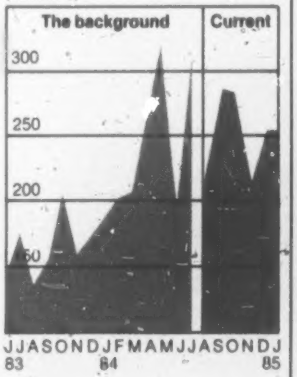
Machine tool orders would seem to confirm this projection. Thus while current readings are a bit under some recent monthly highs (see chart), totals for 1984 ran a hefty 72%

Leading indicators

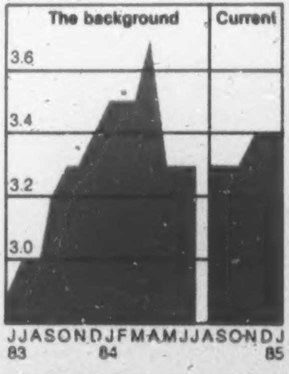
1. Auto sales (Mil units)
(Seas. adj., annual rate)



2. Machine tool orders
(Million $)



3. Overtime hours
(Seas. adj.)



ahead of a year earlier.

And manufacturers remain optimistic. Cincinnati Milacron, the nation's largest tool maker, sees a 20-25% increase in orders.

The fact that factory overtime hours remain on a relatively high plateau (indeed they have actually edged a bit higher over the last month or so) would also seen to confirm the rosy outlook. Combined with recent rises in help wanted advertising, it would seem to suggest that top management is now thinking in terms of steady-to-rising production schedules in the months ahead.

How much of a production gain then? Estimates vary depending on the analyst or econometric model surveyed. But by and large, there is a broad-based consensus that overall industrial production will rise anywhere from 3-5% at annual rate over the next few quarters.

That is encouraging considering that 1985 will be the third straight year of advances, following production gains of 6.5% and 10.5% in 1983 and 1984.

Productivity perking up

U.S. productivity is finally beginning to perk up. Two straight years of solid advance have pushed efficiency more than 6.5% above disappointing 1982 levels (see accompanying chart).

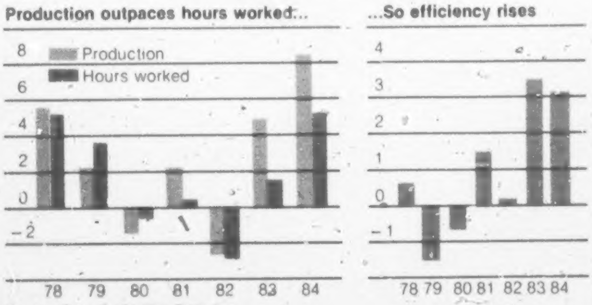
1985 gains, while expected to slow down a bit, will comfortably outpace averages of the last decade or so. Gains for the rest of the 1980s are expected to average 2.5% at annual rate.

Some of the recent advances can be attributed to rising production schedules, which tend to encourage better performance from the available workforce.

Other upward-tugging productivity forces include (1) the gradual installation of more efficient automated equipment, (2) improved labor-management relations which tend to increase worker innovation, and (3) the maturation of the baby boom generation which has transformed relatively inexperienced workers into more productive experienced ones.

Widespread deregulation has also affected productivity by triggering price competition that has led to cost-cutting and efficiency drives. It also allows business to allocate a bigger portion of cash flow for more efficient production methods than regulatory compliance.

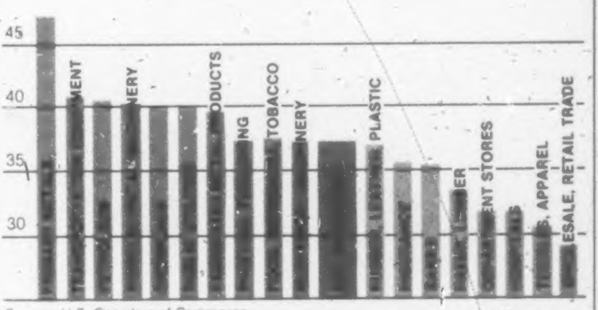
All these developments mark a major reversal from the last decade, and they seem to back up predictions for 2.5% annual productivity gains through the end of the decade.



Nonform business productivity another good year

(% change from previous year)

Source: Bureau of Labor Statistics



The fringe benefit bite

(% of total payroll costs)

Source: U.S. Chamber of Commerce

Fringe benefits under the knife

The slowdown in wage rate increases is spreading to the expensive fringe benefit area, further reducing labor cost pressures on prices.

A new U.S. Chamber of Commerce report finds that these non-paycheck outlays went up only 5.5% in 1983, a rate far below the 8.5% advance in 1982 and even further behind the 8.9% annual advance of the past decade.

Nonetheless, a big chunk of total payrolls continues to be earmarked for fringe benefits—about $7,500 per average employee, or the equivalent of 36.6% of the average payroll.

There is a positive side to this 36.6% figure. It represents a fractional drop from the 36.7% reading of the previous year, suggesting that fringes are now moving up more slowly than hourly pay rates and salaries.

This change is due, in part, to the new hold-the-line competitive business climate and a growing realization that caps have to be put on such "extras" as runaway health costs.

Meanwhile, the latest fringe benefit survey reveals some wide diversity among the various industries. Overall percentage of total payroll costs earmarked for fringe benefits vary from a high of 47.1% in primary metals to a low of 29.0% in wholesale and retail trade.

In general, service industries tend to have lower fringes—although one or two manufacturing sectors are also near the bottom of the scale. These include paper, textiles, and apparel (see accompanying chart).

CURRENT PRICES

Some fall off in prices recently

Industrial producer prices have edged lower again, falling about 2% (2.5% at annual rate).

But these averages could be somewhat deceptive because most of the decline was due to the significant energy drop of 1.7% which was spearheaded by new declines in a wide range of products including gasoline, home heating oil, natural gas, liquid petroleum gas, kerosene, crude petroleum, and diesel fuel.

Factor out this exceptionally soft sector and a much more mixed price pattern appears.

Both organic and inorganic chemical increases helped offset the 1% decline in plastic resins.

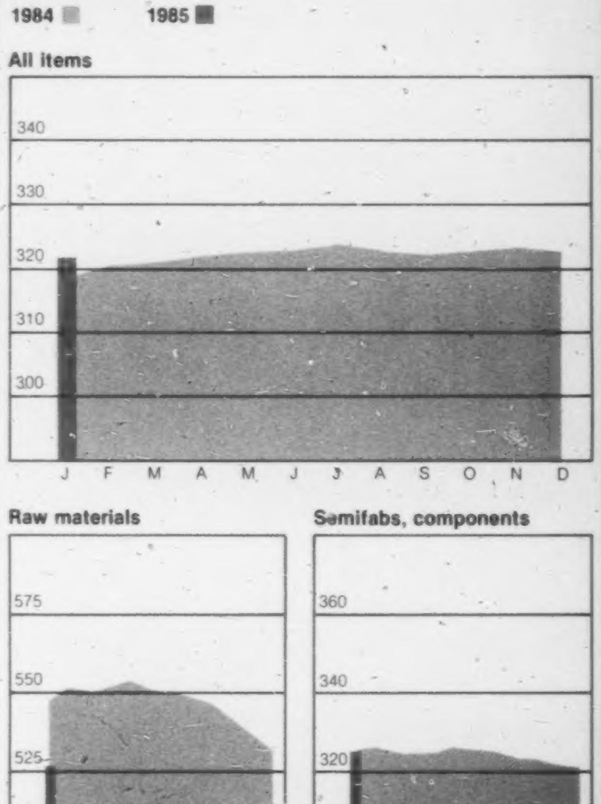
The same uneven pattern is apparent in metals

This month's breakdown

	Latest level (Jan.)	% change from: Month ago	Year ago
Bearings	345.8	0.4	2.9
Bolts, nuts, etc	282.9	1.0	4.4
Chemicals, inorganic	299.3	0.7	3.6
Chemicals, organic	354.7	0.8	−5.6
Concrete products	314.8	0.9	3.2
Corrugated cartons	281.4	0.0	12.5
Cutting tools, small	286.0	0.4	2.2
Electric lamps (bulbs)	339.6	−0.6	0.7
Electronic components	197.9	0.5	4.7
Fans and blowers	357.0	1.6	4.5
Foundry and forge products	323.6	0.1	2.8
Fuel oil (residual)	1127.8	−0.2	3.4
Furniture, commercial	300.1	0.1	2.3
Gasoline	531.3	−4.2	−6.7
Glass, flat	221.0	1.3	−3.7
Glass containers	363.7	−0.1	3.7
Gypsum products	328.5	−0.2	0.0
Hand tools	369.6	1.1	4.9
Hand tools, power driven	229.5	1.3	3.9
Industrial furnaces	381.7	0.2	3.1
Integrating and measuring instruments	229.9	−0.4	2.6
Internal combustion engines	345.7	0.3	2.2
Lubricating oil	794.5	0.0	−0.1
Lumber millwork	312.4	0.0	1.2
Material handling equipment	292.4	0.1	1.9
Metal containers	357.6	0.0	3.9
Metal mill shapes (nonferrous)	312.9	−0.8	−1.7
Metal tanks	304.8	−0.5	−0.1
Motors and generators	348.9	2.0	3.5
Motor trucks	294.4	1.7	5.0
Office and store equipment	153.7	0.5	−1.2
Paperboard	288.9	−1.2	10.2
Paper boxes and shipping containers	273.4	0.3	8.3
Paper office supplies	244.6	0.5	5.7
Paint	278.2	0.3	4.7
Plastic resins	302.9	−1.4	−0.8
Precision measuring tools	255.9	0.4	4.3
Pumps and compressors	353.2	0.3	1.9
Refractories	367.0	0.1	3.7
Rubber belts and belting	342.3	−0.6	−0.5
Scales and balances	233.4	0.3	2.2
Steel products	364.6	−0.1	1.5
Switchgear	275.6	0.3	1.3
Textiles, synthetic fibers	157.6	0.1	−1.0
Textiles, gray fabrics	153.5	−0.1	1.6
Tires and tubes	245.1	0.6	0.4
Transformers and power regulators	229.9	0.3	3.4
Welding equipment	285.7	0.2	1.3
Wire and cable	201.2	0.0	0.0

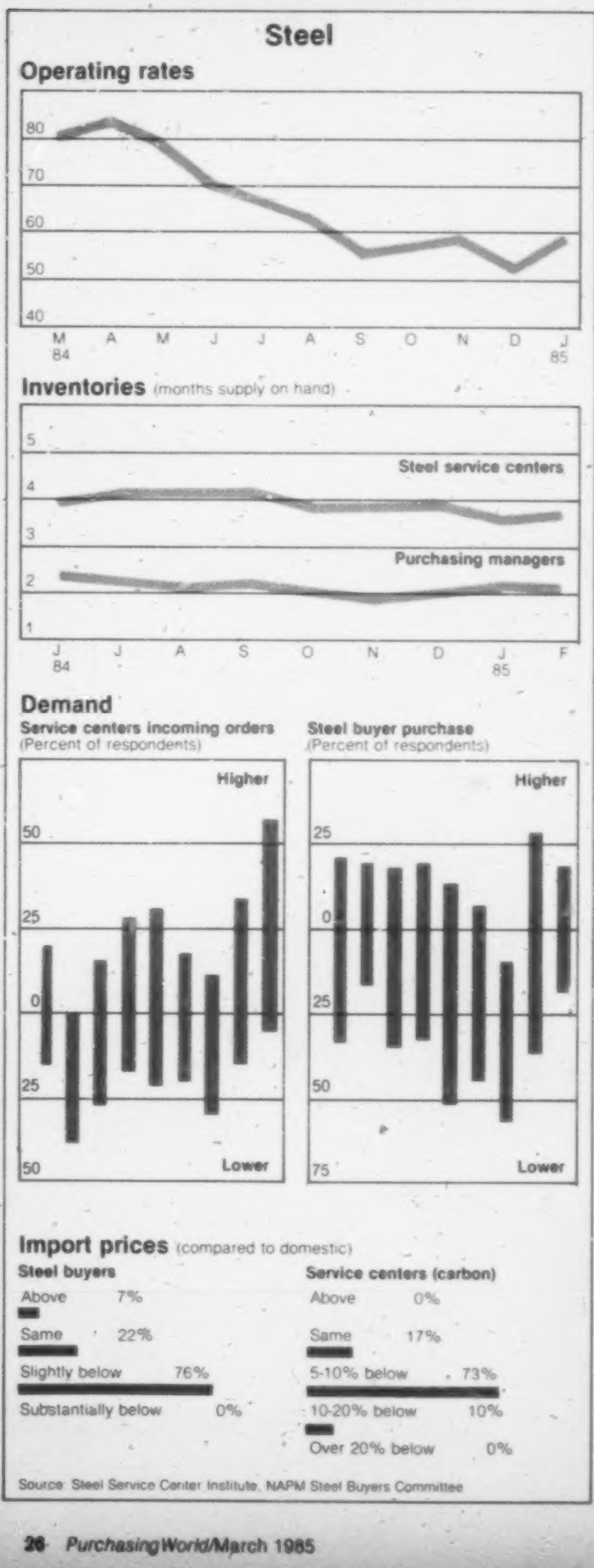
Industrial prices

(Index: 1967 = 100)



Source: Bureau of Labor Statistics

BUSINESS DATATRAK



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

as increases in copper were offset by declines in lead and steel. True, steel is running ahead of last year, but this is probably an exaggeration in light of the heavy discounting.

Offsetting moves were also noted in construction materials. Increases in asphalt paving material, plumbing fixtures, and asbestos shingles were balanced out by falloffs in softwood, lumber, plywood, and non-ferrous wire and cable.

On the other hand, there was some tendency for prices to inch ahead in the capital goods sector where motor vehicles, fans and blowers, food product machinery, construction equipment, and office machinery all managed to move up. Ditto, in some component parts, most notably machine tool parts, electric motors, generators, bearings, and fasteners.

Despite this upward drift in some of these more highly fabricated sectors, price averages continue to exceed expectations.

The year-to-date gains for the overall industrial producer price index is put at a miniscule 0.3%, a remarkable performance considering we are now well into the third straight year of business recovery.

STEEL SCENE

Some optimism seen in steel buying

An improving business trend is translating into a brightening steel outlook.

Some 57% of distributors responding to a new Steel Service Center Institute (SSCI) survey, for example, anticipate a rise in incoming orders over the next three months—the biggest such percentage in nearly a year and one that far outweighs the miniscule 5% who see some decline ahead.

Some of the optimism may be due to the fact that service centers have been generally outpacing the overall steel market. Last year they managed to register a big 18%-plus gain—with the help of new emphasis on just-in-time deliveries. This was far above the 12% advance in overall steel consumption over the same period.

It is not surprising that more muted optimism is voiced by purchasing executives responding to a new NAPM steel survey. Specifically, only 18% plan to increase their steel buys over the next three months. But even this figure is significant because it marks the first time since last July that anticipated increases managed to balance out planned decreases.

This cautious demand view is seconded by most producers who see 1985 shaping up as just a moderately better year.

Other mill forecasts are generally in the same ballpark, and most are predicating the improvement on a substantial drop in imports rather than any significant jump in consumption.

At any rate, service center optimism remains quite strong. Current predictions suggest that distributor sales will rise another 3-4% this year (to about 22 million tons)—thus adding to its 31% market share, itself a new peak.

Inventories: Things are pretty much where they have been over the last few months—as days supply remains fairly constant on both levels.

Availability: Clear sailing as service centers for the fifth consecutive month failed to note a single product that might be tight in ensuing months.

Import prices: Cut-rate incoming shipments are still very much available despite the imposition of new voluntary quotas. In the case of buyers, for instance, three out of four noted a price advantage over comparable domestic products.

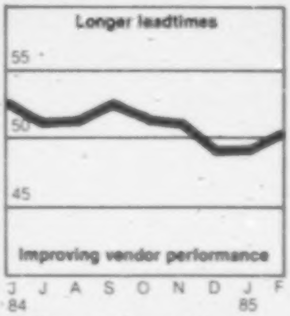
Service centers who look at carbon and stainless steel separately tell much the same story, though the percentage who are getting imports at more than 10% under comparable domestic lines has diminished a bit: only 10% of the responding distributors in the case of carbon (vs 13% a month earlier) and 25% in the case of stainless (vs 31% a month earlier).

These same distributors also indicate some shift in procurement strategy further on down the pike, probably because they figure the new import curbs will eventually have an impact. Thus 31% expect to reduce their dependence on foreign metal over the next six months—a figure made even more dramatic by the fact that not one single firm plans on increased dependency over this same period.

Monthly procurement status report

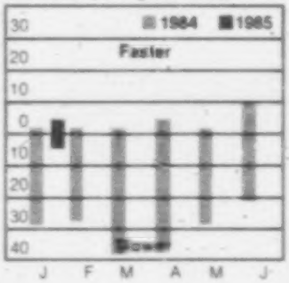
Leadtime index

A "diffusion" index based on 158 key commodities. Avove "50" indicates a tendency for leadtimes to stretch out. Below "50" suggests improving vendor performance.

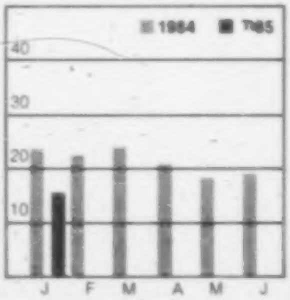


Delivery performance

(Percent reporting deliveries)

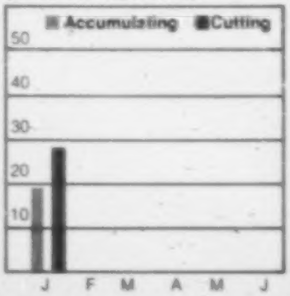


Forward commitments



Inventory strategy

(Percent of respondents)



Source: NAPM

PROCUREMENT STATUS

Everything is under control

Despite early 1985 demand gains, leadtimes remain under control—holding at about where they were during the latter part of last year.

Buyers responding to *PW*'s latest monthly procurement survey seem to be in agreement on this point. They say that several factors are keeping things relatively quiet: the absence of big strikes, better communication between themselves and vendors, and the absence of severe winter storms.

Changes in leadtimes in recent months have been mostly moderate—and have tended to balance out. It is not surprising that *PW*'s exclusive leadtime index is again at the neutral 50 mark. This means no big changes in leads for the average industrial purchase mix.

The NAPM's speed-of-delivery yardstick also shows this same neutrality. Some 90% of respondents report no change and the remaining 10% are equally split between those reporting speedups and those reporting slowdowns.

And if further confirmation is needed, look at current buyer inventory policy. Despite rising production schedules, the average PM has actually been cutting stocks. This is a good sign that he knows he can get any "fill-in" shipments.

Again survey findings tell the story. At latest report, some 28% of PMs queried were reducing inventories compared to the 19% who said they were adding. This marks the fifth consecutive month that parers have been outnumbering accumulators.

Other signs of a "no sweat" situation: Only 16% of buyers say they are committing 90 days or more in advance for production materials. This is down substantially from the 24% reading of two months ago. There has also been a drop in forward commitments on MRO items over this period.

Comments by buyers suggest that they expect this relatively problem-free situation to continue.

Leadtimes and availability

Chicago: Reduced waits (in weeks) are noted for several electronic items: batteries (12-22), capacitors (10-16), and coils (4-12). Also in are aluminum bars (8), aluminum common alloy and heat-treated plates (12), and special copper rods (3-5). Moving out are steel c-r sheets (6) and PVC resins (6).

Cleveland: Some modest improvement (in weeks) is noted for coil coating paint (5), maintenance paint (3), and cold-finished aluminum (10-12). Other metals are mostly available on demand. So is plywood. But hardwood, softwood, corrugated, and plastic shrink film take three weeks.

Los Angeles: Sample waits for metal products (in weeks): grey iron castings (7-8), brass castings (8-10), aluminum sheet (13), aluminum pipe (17). No problems in other areas either: paints (4), semiconductors (12), passive components (18), and electrical equipment (20-24).

BUSINESS DATATRAK

Houston: Another month of little change, with these weekly leads: high-pressure heat exchangers (26-35), electronic components (6-8), domestic drilling pipe (12), MRO items (0-3), nonferrous metals (0-2), centrifugal compressors (45-56), forgings (5-7), control valves (8-26), and mill steel (4).

Philadelphia: Standard reinforced tape has come in to 1 week. Several other items have stretched: chemicals for foam-in-place (1), foam (1), and wooden pallets (1-2). Tall oil and fatty acid are also out, sometimes even on allocation. Steel and nonferrous waits remain unchanged.

Pittsburgh: Silicon has come in to 3 weeks. But other alloying materials range from 2 weeks for manganese, nickel, zinc, and lead—to 4 for magnesium. Mill quantities of fabricated copper takes 6 weeks. Other typical leads: corrugated and folding boxes (3-4), drums (1), lumber (3-4), and steel strapping (2-3).

Leadtimes (in weeks)

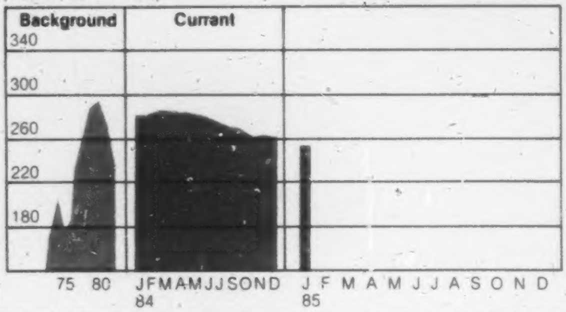
	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	4½	9	9
C-R Sheet (Chgo)	6	5	5
Plate (Phil)	3½	10	10
Plate (Chgo)	2½	2½	2½
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	7	7	7
H-R Bars (Chgo)	3	3	3
Cold-Drawn Bars (Phil)	7	7	7
Galvanized (LA)	14	14	6
Galvanized (Chgo)	6	6	6
Structurals (Chgo)	4½	3½	3½
Structurals (Hous)	17	17	17
Tubing (Phil)	7	7	7
Grey Iron Castings (LA)	7½	7½	5
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	6	6	6
Pipe, Carbon (Hous)	13	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	13	17	17
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	7	7	7
ICs (Linear) (Phil)	17	17	20
Motors (Phil)	15	15	15
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	10	10	20
Relays (Chgo)	15	15	15
Resistors (Chgo)	12	12	14
Resistors, Wirebound (Phil)	10	10	10
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	2	2	2
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	¼	¼	¼
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Napthalene (Chgo)	2	2	2
Paint (LA)	5	5	5
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	3	3½	3½
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	3	3	3
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	6	3	1
PVC Resin (Pgh)	6	6	6
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	3	3	3
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	6	6	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Stc. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	11	11	13
Aluminum Plate (Chgo)	12	14	14
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	11	11	13
Brass Castings (LA)	9	9	7
Brass Rods (Chgo)	4	6	6
Brass Sheet (Chgo)	7	7	9
Brass Tube (Chgo)	5	5	5
Copper Fittings (LA)	3½	3½	3½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	5½	5½	5½
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	2	4	4
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	5	5	5
Zinc (Pgh)	2	2	2
MISCELLANEOUS			
Bearings, Domestic (Phil)	22	22	22
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	50	50	48
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	1½	1½	1½
Fasteners (LA)	7	7	7
Fasteners, Std. (Phil)	4	4	2½
Heat Exchangers, Carbon-alloy Steel (Hous)	20	20	20
Heat Exchangers, Hi-pressure (Hous)	31	31	43
Insulation Mat'l. (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	2½	2½	2
Pumps (Hous)	35	35	35
Pumps (LA)	9	9	9
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	17	17	17
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Latest month	255.8
Month before	261.9
Year ago	283.6

(Index: 1967 = 100)

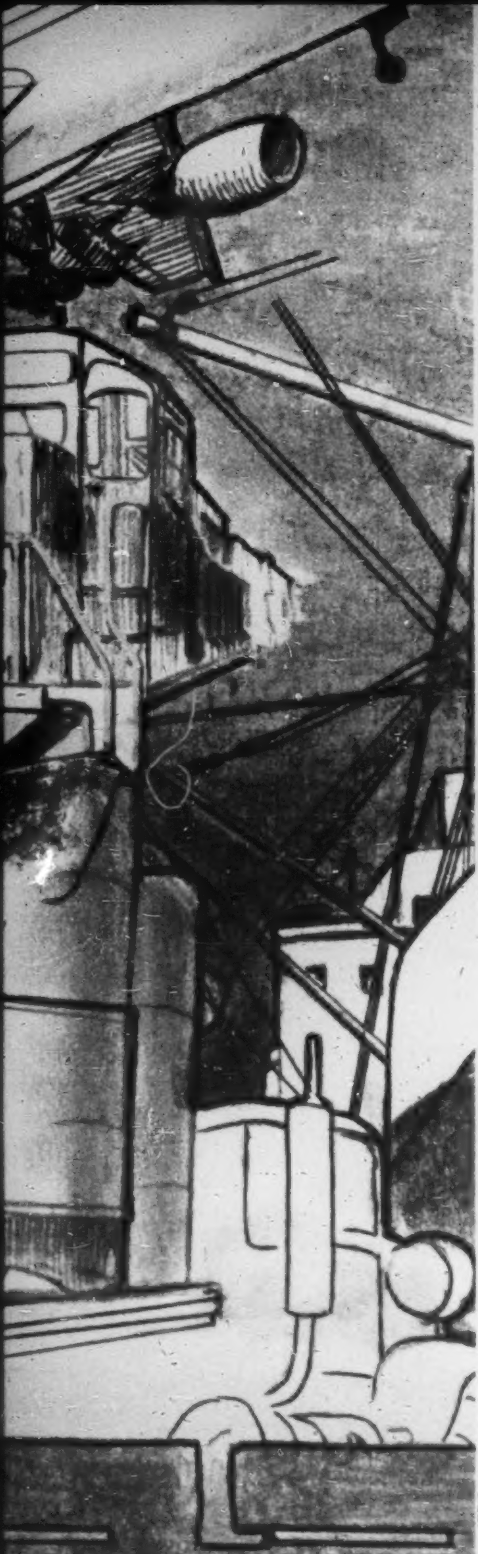


Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	347.00
Steel, structural shapes, Pitts., cwt	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt	25.10	25.10	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	23.95	23.95	17.50
Steel, bars, Pitts., cwt	23.95	23.95	17.50
Steel, bars, C.R., Pitts., cwt	29.25	29.25	26.00
Steel, plates, Pitts., cwt	23.25	23.25	23.25
Steel, plates, H.R., Pitts., cwt	23.25	23.25	23.25
Steel, sheets, C.R., Detroit, cwt	27.10	27.10	27.10
Steel, strip, C.R., Chi., cwt	35.30	35.30	35.30
Steel, basic wire, Pitts., cwt	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.510	0.490	0.745
Antimony, in alloy, lb	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb.	5.35	5.20	5.20
Brass, red, 85%, [sheet], lb	1.28	1.26	1.22
Brass, yellow, [sheet], lb	1.23	1.21	1.17
Cadmium, ton lots, lb.	1.25	1.25	1.25
Copper, electrolytic, wire bars, refd., lb	0.65	0.64	0.68
Copper sheet, over 24 in., lb	1.37	1.35	1.31
Lead, common, N.Y., lb	0.19	0.18	0.24
Magnesium, pig ingot, [99.8%], lb	1.48	1.48	1.43
Mercury, 20 fl. lots, N.Y., fl	310.00	312.00	292.00
Molybdenum Climax Oxide/bags, lb	4.65	4.65	4.65
Nickel, electrolytic, producer, lb	3.20	3.20	3.20
Platinum, producer, oz	475.00	475.00	475.00
Silver, N.Y., oz	6.10	6.13	8.75
Tin, Straights, N.Y., lb	5.65	5.76	6.23
Zinc, Prime West, East St. Louis, lb	0.43	0.45	0.51
Zinc, die casting alloy, No. 3, lb	0.495	0.515	0.575
PAPER			
Uncoated book #3 offset, ton	850.00	850.00	810.00
Watermarked bond, ton	985.00	985.00	915.00
Gummed sealing tape, carton	16.25	16.25	15.45
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	495.00	495.00	475.00
Wrapping paper, std. distributor cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	320.00	320.00	320.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	0.383	0.397	0.301
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.03	1.04	1.02
Cotton middling, 1", N.Y., lb.	0.598	0.621	0.597
Printcloth, 48", 80x80, N.Y., spot. yd.	0.71	0.78	0.85
Army duck, 37", 13 oz., yd.	1.96	1.78	1.79
Blended printcloth, 64", 78x54, yd.	0.74	0.70	0.72
20s combed yarns	2.12	2.12	2.14
Wool tops, N.Y., lb.	3.60	3.60	3.60

	Latest price	Previous month	Year ago
CHEMICALS			
Acrylonitrile, tanks, lb	0.455	0.455	0.430
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	195.00
Benzene, petroleum, tanks, Houston, gal.	1.17	1.15	1.40
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb	0.58	0.58	0.58
Formaldehyde, USP, 37% [12% to 15% meth.], tanks, lb	0.106	0.106	0.106
Glycerine, synthetic, tanks, lb	0.86	0.81	0.81
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.54	0.54	0.45
Naphthalene, crude, tanks, lb.	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.305	0.305	0.305
Polyethylene resin, low density liner film grade (market price), lb	0.29	0.29	0.42
Polypropylene, homopolymer grade (market price), lb.	0.34	0.34	0.40
Polystyrene, general purpose grade (market price) lb.	0.35	0.35	0.42
Shellac, bone dry, N.Y., lb.	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.35	0.35	0.35
Sulphur, crude, ex-terminal, Tampa, Fla., lt	157.50	157.50	132.50
Sulphuric acid, 66%, commercial, tanks, ton	56.85	56.85	56.35
Titanium dioxide, anatase, reg., carlots lb	0.69	0.69	0.69
Xylene tanks, gal	1.26	1.26	1.35
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	301.70	308.75	313.75
Lumber, 2x2, pine, mbf, cl	300.40	288.15	314.05
Plywood, plyform, ¾", msf, cl	563.00	572.60	559.55
Plywood, ⅝", msf, cl	375.10	377.95	348.50
Cement, bulk, ton, tl	64.46	63.74	62.35
Sand, ton, cl	6.20	6.23	6.15
Ready-mix concrete, 3,000 psi/cu.yd., 15 cu. yd.	47.66	47.62	45.80
Crushed stone, 1½", ton, cl	7.52	7.47	8.00
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.79	0.79	0.76
Gypsum sheathing, ½"x1"x8", msf, tl	205.44	206.40	198.97
Brick, common, per thousand, tl	179.15	178.03	172.50
Asphalt paving, AC-20	173.17	172.97	161.31
Concrete sewer pipe, 12", prem. joint, per foot, cl	6.97	7.15	6.79
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl.	26.25	26.25	26.20
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	31.00	31.00	32.90
Gasoline, 91 oct., reg., Los Angeles, rack, gal	0.725	0.705	0.738
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.699	0.674	0.808
Heating oil, No. 2, Chi., bulk, gal.	0.730	0.750	0.854
Heating oil, No. 2, N.Y., bulk, gal.	0.808	0.808	0.825
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.50	26.50	26.25
Jet kerosene, gal.	0.770	0.755	0.825
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	.388	0.420	0.460
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	87.00	85.00	105.00
Steel, No. 1, hvy., dlvd., Chi., ton	81.00	78.00	88.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	0.560	0.535	0.590
Copper, No. 2, East, wholesale buy,	0.475	0.445	0.505
Brass, red, East, wholesale buy, dlvd., lb.	0.520	0.495	0.550
Brass, yellow, East, wholesale buy, dlvd., lb.	0.340	0.330	0.325
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	0.335	0.335	0.500
Alum., mixed clip., E., wholesale buy, dlvd., lb.	0.350	0.355	0.515
Zinc, old, East, wholesale buy, dlvd., lb.	0.140	0.160	0.185
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.110	0.100	0.140
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	15.00	15.00	30.00
Paper, old corrug. box, dlr., N.Y., ton	10.00	10.00	25.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.12	0.12	0.13
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.34	0.34	0.34

[Sources: **Metals Week, Engineering News-Record** (20-city averages), **Platt's Oilgram Price Service**.]



only one rude or incompetent employee to lose a big customer."

Anything that ties the customer directly into a transportation company is being seriously considered. With computerized telephone-linked rating and pricing systems, customers can dial into the carrier's computer and find out the latest rates, check on the progress of a shipment, or verify transit routes. Or at considerably greater expense, many companies are providing direct computer hookups with their better customers.

Reliance on the latest in technology to improve their operations and service isn't cheap. And several companies say that they plan to make hefty R&D expenditures to stay on top of technological developments.

Companies that offer customers rail, truck, barge, and air transportation options will, in the opinion of many of these experts, have a competitive edge in the market.

In any case, their major objective seems to be to simplify the whole process of doing business with them. And that, after all, is the same reason that *Purchasing World's* editors have collected this information for you. **PW**

Quarterly transportation report

Rate slowdowns seen for 1985

More good news on the freight front. Rate hikes for 1985 will probably be considerably under projections made just a few months ago. But look out in 1986, advances could be a bit higher than previously forecast.

The new estimates—courtesy of Wharton Econometrics—put the

Buyers' guide to 1985 carrier services

American Freight Systems
AFS has instituted a computerized rate system designed to simplify its rate schedules for its customers. The company has also begun a Quality/Productivity program for its employees. Worker performance will be judged on a terminal-by-terminal basis using a series of indexes. **Circle P16**

Carolina Freight
Three-fold thrust for 1985: 1) Service, 2) Systems, and 3) Price. A new computerized rating program, called SALLY for short, allows customers to dial into the system at any time for up-to-date prices or to track shipments. The company also plans to spend more time and money on R&D in areas like bar code technology. **Circle P17**

CSX
With the addition of barge service along the Ohio-Mississippi River system, CSX can now call itself a total intermodal shipper. On one bill of lading a shipment may move continuously from rail to barge to truck and then to distribution warehouses. Its slogan is "One call for the whole haul." **Circle P18**

Duff Trucking
Duff's 1985 Target Service Plan is a determined effort to achieve 100% on-time delivery while saving time, money, and effort for both the customer and the company. Its motto—"On-time delivery—every time." **Circle P19**

Hall's Motor Transit
Hall's believes that profit begins in the purchasing department so they've developed a computer aided analysis service that specializes in the control of incoming freight costs. Inbound Control Systems (ICS) consultants will show purchasing pros how to better control the transport of inbound goods from outside vendors. **Circle P29**

average overall increase in *PurchasingWorld's* exclusive freight rate index at only 3.4% for 1985. That's down significantly from 6% increases projected last fall.

Incidentally, the slowdown may already be under way. During third quarter 1984 (the latest figures available) truck averages dipped 3.3% at annual rate, with barge tabs off by 10%.

Why the big downward shift in 1985 projections? Much of it, say Wharton analysts, can be traced to substantially lower energy price projections. Specifically, OPEC's infighting has already brought crude oil tags down, with further reductions expected. And when oil falls, the cost of almost every other transportation input follows suit.

Another factor holding 1985 hikes to a minimum is the trend toward smaller-than-expected labor cost increases which are pegged at 5.2% for 1986—up a bit more than a percentage point from the previously estimated advance. Behind this shift: changed economic ground rules. More specifically, analysts at Wharton Econometrics who once saw a recession on the way now see continued growth. GNP growth rates at the end of next year could slow down to 1% or under at annual rate for one or two quarters. But that is the extent of any anticipated slowdown. As a result, freight rates should move up at a slightly faster pace rather than slow down as projected earlier.

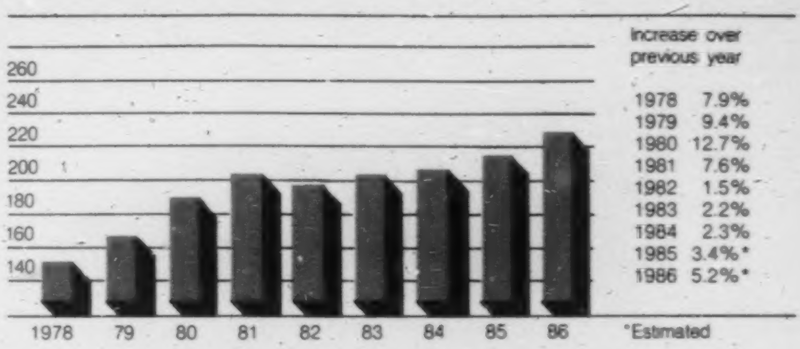
And what is true for overall freight holds true for each of the key transportation modes. Current projections for rail, truck, barge, and air are all toned down for 1985 and beefed up for 1986.

Here's a more detailed look at the Wharton projections in each sector:

Rail: Traffic growth has slowed from its hectic first-half 1984 pace. The value of the rail industry's services actually fell 1% in the third quarter as economic growth took a breather.

...continued

PurchasingWorld freight rate index



Leaseway Transportation
Single-source leasing and its new flat-bed division are expected to be growth areas for Leaseway in 1985. Interest in contract carriage is also expected to grow as many companies delegate responsibility for transportation in order to free assets that would otherwise be spent on fleets. **Circle P20**

McLean
New for 1985—a zip code rating program designed to simplify the rating process; a new express lane service which incorporates closely monitored direct loading in key markets within the McLean nationwide network; and a renewed commitment to customer satisfaction at each point of service. **Circle P21**

Roadway Express
During the months of February and March Roadway will donate 7¢ for each shipment moving along the East Coast (from Florida to Maine) to a fund for the renovation of the Statue of Liberty and four other national monuments. The program, entitled "Give Liberty a Lift," is expected to raise over $100,000. This program is one of a series emphasizing different parts of the country in sales efforts. **Circle P22**

Rollins
Rollins expects that its major area of growth will be in the area of single-source leasing of both trucks and drivers. To meet the increased demand they have launched a strong sales training and support program. **Circle P23**

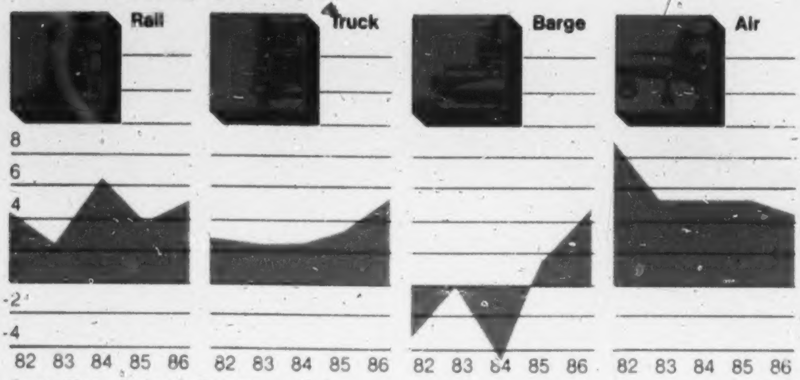
Santa Fe
New for 1985 is a rail intermodal transportation service that includes centralized intermodal terminals from Chicago to Los Angeles and throughout the southwest region. Also new is a telephone linked car location information service. **Circle P24**

TNT Companies
TNT has reorganized its transportation group to achieve higher efficiency of operations. It is also pushing a new carrier concept that will enable customers to route their shipments through regional or interregional carriers with one call and one bill of lading. TNT Companies are now able to handle long cross country hauls as well as shorter regional hauls. **Circle P25**

United Van Lines
United has launched a program to improve the performance of its agents and has declared 1985 "The Year of the Van Operators." Strong marketing efforts will be made for its subsidiaries—Matlock Trailer, Transprotection (an insurance company), and United's own leasing company. Quality shipping of special commodities is a priority item. **Circle P26**

Yellow Freight
Coverage will be expanded further through terminal openings and additional direct service points. The company also expects to add more twin trailers to its fleet in order to reduce claims and improve productivity and service. Electronic communication capability will be enhanced. **Circle P27**

Freight cost outlook by mode
(Percent increase over previous year)



Source: Wharton Econometric Forecasts

Ton-miles, however, still managed an impressive 10.6% advance for the year. And piggyback remains the hot rail story—with ton miles in this subsector up more than 14% in 1984.

Nevertheless, the big rate hikes of early 1984 seem to be over. The average should rise only 2% at annual rate over the last six months.

Quarterly increases should build slowly to a 5% rate by the end of the current year. But even so, the average for the year is put at only 4%. 1986 hikes are expected to average about 5%.

Trucking: Tonnage continues to run well ahead of year-ago levels for both Class I and Class II carriers. Freight totals in recent months, for example, have been up about 8% compared to levels of a year ago. Less-than-truckload lots (LTL) have outpaced truckloads (TL).

Meanwhile, rates have moved in concert with general economic activity—showing a hefty 8.3% increase at annual rate in the first half of 1984—only to fall 3.3% in the third quarter as general business activity slows down. A moderate advance of only 2.2% was posted for 1984 over 1983.

In 1985, the low starting point for rates should hold the average annual hike to 3.6%—although quarterly advances will build up to 5.6% by the fourth quarter. And for 1986, the average rate increase is projected at 5.4%.

Air: Traffic has been accelerating. Ditto rates, which have been rising to reflect that activity. Freight ton-miles carried by aircraft probably exceed 6.5 billion for 1984—up one-half billion tons or 8% from last year's level.

Prices over the same 12-month period rose 5.6%. Increases should continue at the same pace in 1985 and then slow to about 4.5% in 1986.

Barge: This sector should continue to show the smallest price increases in both 1985 and 1986 (after logging what looks to be a 4.5% decline in 1984). Continuing overcapacity and cutthroat interindustry competition should hold hikes to 1.7% in 1985 and to 4.6% in 1986. ***PW***

Survey of the month

Transportation buyers enjoy enviable position

Recent freight rate trends tell the story. Despite a big 7-9% increase in ton-miles shipped last year, buyers managed to hold down transportation rate increases to around 2.5%.

In some cases, deregulation coupled with hard-nosed bargaining for big discounts has resulted in even smaller hikes, holding some overall costs pretty much where they were before the business upturn began.

Significantly, freight buyers responding to a new nationwide *PurchasingWorld* survey are very optimistic about 1985. On average, they expect some modest acceleration. But most expect to hold hikes at or under the general inflation rate.

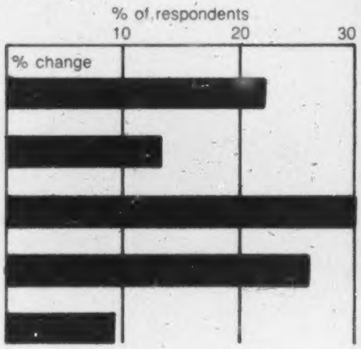
In a nutshell, buyers say the picture is rosy for transportation services—a segment of the economy which in recent years has accounted for about 10% of the GNP. Here's a capsule summary of their thinking:

- **Overall 1985 increases** The overall advance is put at only 3%. About 30% of those queried hope to escape without any appreciable advance over the current year. And about one in four actually hopes to better their 1984 performance.

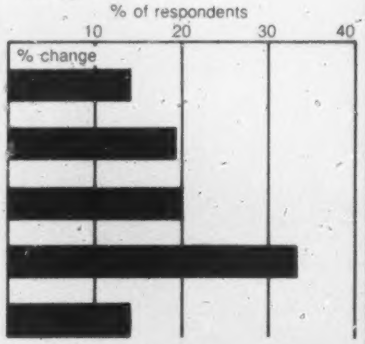
These optimistic ***PW*** survey pro-

Freight cost trends: the buyer view

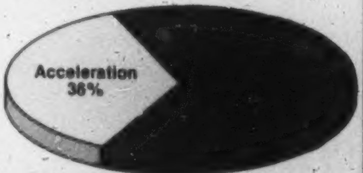
Last year



This year



1985 vs. 1984



Source: PurchasingWorld

jections are remarkably close to the ones provided by Wharton Econometrics' forecasts in this issue—which projected 2.3% for 1984 and 3.4% for 1985.

- **1985 trucking rates:** *PW* respondents see rate increases averaging in the 3-5% range—with the lower end reserved for truckload (TL) shipments and the higher end for less-than-truckload (LTL) quantities. Probable reason for the difference: Truckers, forced into giving concessions to big shippers, will probably try to make up the difference by charging more to smaller shippers with less bargaining leverage.

Again, this 3-5% overall increase coincides with the Wharton forecast which pegs the 1985 truck increase at 3.6%. Buyers agree there are still plenty of opportunities to whittle at rates. As one puts it: "Competition should put heavy pressure on published tariffs. We fully expect to continue getting the 20% discounts that have prevailed over the past year or so."

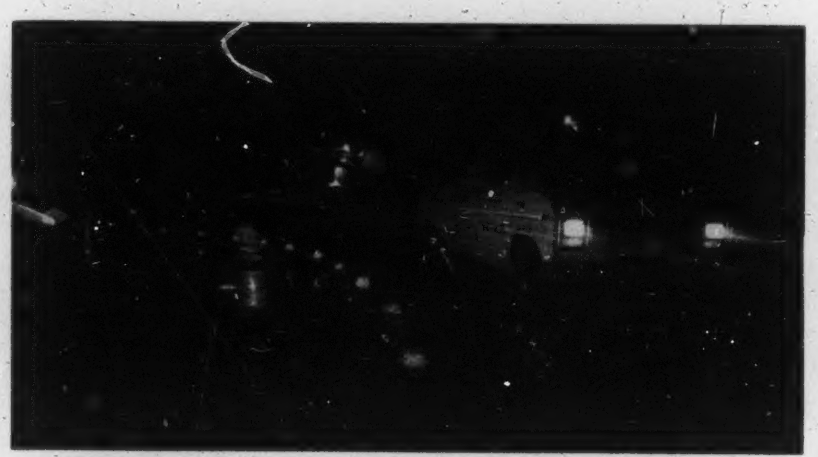
- **1985 rail rates:** The average advance suggested by the *PW* survey is about 3%—less than half the 6.5% posted in 1984. This is not only confirmed by Wharton's 4% estimate, but a new Standard & Poor's study sees the average revenue per ton mile rising at only 2%.
- **Other 1985 rates:** No big runup is expected in the barge, ocean shipping, and air sectors. Again, a significant number of respondents hope to keep these tariffs at or under year-earlier levels.

Credit much of the success in holding the price line to industry deregulation. It is worth noting that for the first time in 80 years, the majority—about 60%—of freight moving in this country is free of governmental interference.

Whatever the percentages, it is apparent freight buyers are leaving no stone unturned to contain costs. One freight manager, for example, has set a program in motion that involves use of fewer carriers, more annual contracts, caps on increases, and efforts to mesh company operations into carrier potential.

In this traffic manager's words, "Our aim is to cut drastically our carrier base in order to increase our bargaining leverage. In effect, we'll be a better customer with long-range plans to match our needs with carrier routes. That will result in greater economies for everybody."

Other cost-cutting strategies noted by the survey include (1) intermodal shifts—many of these involving piggyback operations, (2) shifts away from common carriers to private haul, (3) consolidation of loads in a given geographical area, and (4) negotiations to nail down good backhaul deals. **PW**



Package air express growth offers new options for buyers

Strong competition, deep discounts for volume, and new services mark one of the fastest growing areas in transportation.

Thomas F. Dillon C.P.M.,
senior editor

The air package express business is booming. Annual growth rates in the 40-50% range, or even more, are not unusual for some companies. The industry is optimistic, innovative, and highly competitive. All of which spells good news for buyers.

What can customers expect in the near future? Industry executives interviewed by *Purchasing World* seem to agree on the following prospects:

- **Rate stability:** Any increases to be slight.
- **Broader geographic coverage:** More carriers are planning to offer international services—and all carriers are looking to fill gaps in their service areas.
- **More innovative marketing.** Target emphasis is on specific markets, and on specific accounts.

The biggest push, say the experts, will be in the international arena. The main reason for this thrust is the globalization of the U.S. economy with more U.S. companies dependent on overseas suppliers and markets. Also, today's higher valued air express shipments absorb higher transportation costs more readily. The desire of companies to

INDUSTRY OUTLOOK 1985

Most industrial growth solid, but some losses seen

It is looking more like a mixed year for industry-by-industry demand gains.

That's what Uncle Sam's key analysts are projecting in the new *1985 U.S. Industrial Outlook*—a detailed forecast of what lies ahead for over 350 key business sectors. The forecasts suggest that the majority of industries will not come close to equaling their 1984 gains.

Of course, there are exceptions, particularly in high tech and aerospace industries. But a few industries—including turbines and generators, sawmills, primary zinc, shipbuilding, and electronic tubes—will probably end up in the negative column before the year is out.

All forecasts are based on some key assumptions—namely increases of 4.3% for GNP, 4.5% for the GNP price deflator, 4% for wages, 1.5% for productivity, and the added assumption that unemployment will hold at 7%.

With the above in mind, here are some of the projections—all in real or deflated terms:

- **Steel:** Consumption may reach 100 million tons this year, only about 5% ahead of 1984. Shipments by domestic industry could top 80 million tons, but only if import levels are moderate. Prices, however, are unlikely to firm significantly because of the import situation. Growth for the balance of the decade is seen as moderate, with consumption rising only into the 105-110 million ton/year range.
- **Ferrous castings:** Continued recovery from the severe recession of 1982 is expected, though at moderating rates, with total shipments put at about 13 million tons this year—about 4% above 1984. The same annual rate of increase is anticipated through 1990 when totals should reach 16 million tons.
- **Copper:** Refined use will rise about 3% this year to about 2.4 million tons. Prices could edge up a bit, with tags not rising much above production costs. Annual U.S. output could fall by as much as 7% a year. Looking beyond 1985, declines in use should continue—perhaps as much as 7% by the end of the decade. After that, further drops could be in the offing as fibre optics gain strength.
- **Aluminum:** Look for a 3% gain in shipments (to 16 billion lb). But this will be well under the 1984 advance. In the longer term, all signs point to about a 3.5% annual rate of gain through 1989—as per car use grows from 137 lb to 200 lb. U.S. primary capacity should decline as imports become increasingly important.
- **Lead:** A moderating economy, reduced lead in gasoline, and a decline in poundage per battery should mean a 2.5% decline in consumption this year (to about 1.24 million tons). Long run usage should grow less than 1% per year, bringing total consumption to only about 1.26 million tons by the end of the decade.
- **Zinc:** A small decline in residential construction, combined with modest gains in nonresidential building and autos, should result in only a 1% increase in slab consumption (to 970,000 tons) in 1985. In the longer run, however, the metal (helped by growing use of galvanized steel) should advance at more than a 2% annual rate, bringing the 1989 total to nearly 1.1 tons.
- **Nonferrous castings:** Sales could be up a strong 8% this year (to 2.9 million tons) thanks to increased auto volume and a higher percentage of lightweight castings used in each car. But strong global competition is expected over the next few years, so imports may eat into the domestic market.
- **Metalworking equipment:** Shipments will be up 6% this year. But the machine tool segment will continue to operate well below capacity levels, with exports expected to lag and imports expected to continue to increase as developed and newly developed countries seek larger shares of the U.S. market.
- **General industrial machinery:** A 4% growth rate is seen for 1985, somewhat under last year's ad-

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How 1985 demands shape up

(% change in real terms)

Cement	4
Ready-mix concrete	4
Gypsum products	-2
Lumber	-1½
Pallets & skids	4
Softwood plywood	-7½
Corrugated boxes	4½
Folding paperboard boxes	2
Setup paperboard boxes	0
Fiber cans & drums	4
Metal cans	1
Glass containers	1
Plastic bottles	6
Coal	5
Refined petroleum products	0
Petrochemicals	4½
Plastic resins	6
Synthetic rubber	½
Paints	2
Adhesives & sealants	9
Hose & belting	2
Steel	6
Ferrous castings	4
Primary copper	10
Primary lead	44
Primary zinc	-3
Primary aluminum	3½
Nonferrous castings	8
Metal-cutting machine tools	9
Metal-forming machine tools	6½
Tools, dies, jigs	5½
Power driven hand tools	7
Industrial furnaces	8
Construction machinery	5
Pumps & compressors	4½
Internal combustion engine	7
Fans & blowers	3
Refrigeration & heating equipment	3
Farm machinery	5
Mining machinery	6½
Oil field machinery	6½
Food products machinery	3
Textile machinery	3
Paper machinery	3½
Printing machinery	4
Screw machine products	10
Fasteners	3
Valves & fittings	7
Bearings	6
Computer equipment	18
Radio & TV equipment	7½
Telephone & telephone equipment	8
Semiconductors	43½
Electronic connectors	6
Electronic resistors	-½
Electron tubes	-4
Measure & control instruments	5
Surgical & medical instruments	7
Dental equipment	2½
Photo equipment	5
Motor vehicles	4½
Aircraft	20
Shipbuilding	-4
Rail freight cars	108
Household furniture	4
Household appliances	4
Consumer electronics	5
Bicycles	3

Source: US Commerce Department

vance. More specifically, here's how subgroups will fare over the current year: construction machinery (5%), pumps and compressors (5%), combustion engines (7%), and refrigeration and heating equipment (3%).

- **Special industrial machinery:** Shipments will be up 5%, a bit above last year's 4% advance. Exports will be up 11% and will account for more than 25% of total shipments. Imports will be up 12%. Here's a more detailed shipment rundown for 1985: farm machinery (5%), mining and oil field machinery (6.7%), food products and textile machinery (3.2%), paper industry machinery (3.6%), and printing equipment (4.0%).
- **Metal components:** Figure on a 6.4% increase, down slightly from last year's 6.9% figure. But imports will be up 19%, on top of last year's 35% advance. Specific subsector shipments for 1985 are as follows: screw machine products (10.0%), industrial fasteners (3.0%), valves and fittings (7.1%), and bearings (6.0%).
- **Electronic components:** A 38% increase in shipments is forecast, with good, albeit decelerating gains seen for semiconductors (43.5%). Much slower activity is seen for connectors (5.9%), capacitors (3.0%), resistors (-1.5%), and electron tubes (-3.9%).
- **Computer equipment:** An 18% increase is projected, almost as big as last year's 20% jump. Exports will grow about 30%. But imports are expected to be up substantially too. Major product introductions this year include a line of big processors with significant price and performance improvements. Personal computer sales will ease off a bit, but should still remain in the high 15-20% range. ***PW***

Directory to aid government buying

The first two in a new series of directories called Procurement Planning Services Directories (PPSD) make their appearance in March. According to co-publishers Dun & Bradstreet and its publishing subsidiary Reuben H. Donnelley, the first numbers cover Information Services and Management Services.

Publication date of the directories in March is intended to coincide with the "prime planning" period for about 4,000 procurement officers in more than 1,200 federal contracting offices. According to Donnelley vice president James K. Kneussl Jr., these Federal agencies spend more than $2 billion a year on information and management services.

The directories, which will be distributed to government agencies free of charge, will provide verified source listings of companies that have established a history of business experience with the government, articles on the "how to" of procurement, and paid advertising by suppliers wishing to reach decision makers in government buying.

For further information on the Procurement Planning Services Directories **Circle P166 on card**

New newsletter from Ameritech

Ameritech Services Inc. is publishing a quarterly newsletter, called *INFOTECH*, to provide technical information about its business. Ameritech is comprised of five Bell Operating Companies: Illinois Bell, Indiana Bell, Michigan Bell, Ohio Bell, and Wisconsin Bell.

The newsletter is aimed at keeping company presidents, national accounts managers, engineers, and purchasing people informed about the latest developments in both products and product information publications.

INFOTECH's first issue included articles on equal access plans, the new Simplified Message Desk Data Link Interface specification, and a market analysis of ESS software feature needs.

Future issues will include stories on the equal access plan, a data-over-voice specification, the new Dial 1 Plus service, and buyer contacts for more than 20 commodity categories including ESS switching, power, customer premise equipment, paper, tools, chemicals, plastics and cable.

Subscriptions are $18 a year. A complimentary copy of *INFOTECH* may be obtained using the reader service card. **Circle P169 on card.**

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RCA moves to paperless purchasing with EDI

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STEEL REPORT

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Helping you manage the business of buying

Vol. 29 No. 4-April 1985

Special report: STEEL

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With steel mills running at 60% of capacity and with a lot of cheap imports still in the pipeline, any price advances will come only in the form of narrowing discounts—which in many cases are fairly deep.

53 Changing market poses challenges for buyers
Domestic producers are scrambling to meet demands for quality and just-in-time delivery from more demanding buyers—while fending off the onslaught of imports.

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Buyers' computers and sellers' computers are talking to one another—through interconnection with a third party network. Here's how Electronic Data Interchange (EDI) is working for RCA at a number of locations in the East and Midwest.

62* Parlays JIT delivery to high tech firms into fast growth
Using its propietary information management systems, Skyways Inc. is helping firms achieve just-in-time delivery nationwide on their inbound shipments.

66* Quality tops list on survey of automotive purchasing
PMs at the auto companies are adamant in their assessment that quality is Number One on their list of what really counts. Other highlights of a survey by Ward's Auto World, a sister publication of *PurchasingWorld:* a shrinking domestic supplier base, more single sourcing, more sourcing from abroad, and longer term commitments.

78* CF Airfreight and Eastern Airlines in first-of-a-kind agreement
The two big transportation companies have teamed up to offer new overnight cargo and passenger service using Eastern's A300 Airbuses.

82* Tech file: vibratory equipment
Looking for a fast, dependable and efficient way of bulk material handling for chemicals, minerals, food items, pharmaceuticals, and other free flowing products? Author William S. Bules of Eriez Magnetics tells how vibratory equipment fits the bill.

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Photo courtesy of Interstate Steel Co.

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Cover photo: (Left to right) Scott I. Alexander, Director, Corporate Contracts-Materials; Leonard F. Colangelo, Manager, Corporate Contracts-Materials; David A. Riggs, Staff Vice President-Materials. Photo courtesy RCA.

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PW PREDICTS

Robert S. Reichard, executive editor

Price surveys see moderation

All signs point to continued price moderation, not only through spring, but probably well into summer and fall as well.

This is supported fairly well by new price surveys. A just-completed *PurchasingWorld* survey, for example, suggests discounts are still easy to come by, with almost 75% of queried PMs getting discounts on at least some of their purchase mix.

Equally encouraging are the latest findings of the NAPM Business Survey Committee. Specifically, more buyers are now reporting price declines (18%) than boosts (7%) and the gap between the two has been widening in recent months.

Also worth noting: The 7% who are reporting higher prices represents the lowest such number since December, 1982, when the economy was at its low point. It is hard to believe that the same small number is being reported when output is a hefty 23% above the recession low.

Other good news comes from Uncle Sam's official price indexes: (1) The industrial producer price index has remained relatively unchanged during the first quarter, despite the fact that this yardstick often fails to pick up price shading; and (2) import prices have actually been declining.

This import drop, to a large extent, reflects the continuing strong dollar. And while the dollar's value *vis-a-vis* other currencies has stabilized, it will take at least another 3-6 months before the currency runup of late 1984 and early 1985 has its full impact.

Still other signs of continuing price restraint come from the cost side of the equation. For one, most basic materials remain extremely soft. *PW's* raw material price barometer—a grass roots indicator of cost pressures further upstream—is very shaky.

This weakness is pretty much spread over the broad spectrum of materials. The average steel quote, for example, is almost $100/ton under list. Most nonferrous metals remain under year ago levels; chemicals and plastic resin discounting is localized; key electronic component tags have turned down sharply; and energy is barely holding at current levels.

Perhaps even more significant for future price trends is the continuing lull in labor cost pressures. Certainly, the 3% average productivity gains of 1983 and 1984 won't be repeated. But if we manage the 2% advance now being predicted by most analysts, it would provide a significant offset to the relatively small 4% increase in pay costs that seem to be shaping up for 1985.

With all of the above forces pointing toward restraint, it is easy to see why most econometric forecasting models aren't seriously concerned about prices. The latest DRI projection, for example, sees only a 1.3% increase in industrial producer prices this year and only a 3.8% advance for 1986.

Wharton forecasters are in agreement with forecasts of 1.3% and 3.3% increases in this key inflation indicator for 1985 and 1986 respectively.

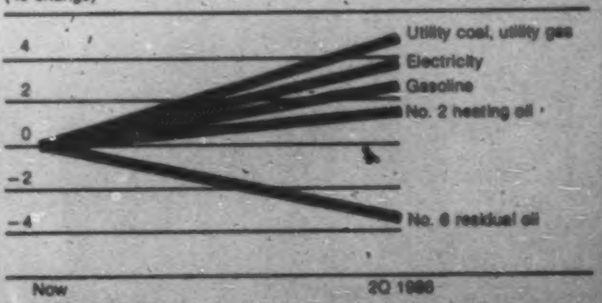
Energy price trends

Overall energy price increases should remain stable over the next 12 months, although there may be some significant variations on a product-by-product basis, according to a new quarterly review by Department of Energy analysts.

Here's a more detailed rundown: continuation of the $28/barrel for crude oil; no change in petroleum products consumption; and only a 2% increase in overall energy use.

- **Gasoline:** While price wars have brought prices in some areas of the country to under $1/gallon, the general trend should be slightly up, with average pump quotes rising from $1.16/gallon in the current quarter to $1.19/gallon by mid-1986.
- **Heating oil:** Average wholesale tags should remain static at around 81-83¢/gallon.
- **Residual fuel oil:** Expect weak prices. Continuing consumption-declines and soft crude oil prices should knock about 3¢/gallon off the average quote over the next four quarters, bringing prices down to about 65¢/gallon.
- **Natural gas:** Little change is seen in wellhead prices through the end of the year. Some upward drift next year could bring quotes for utilities up about 4.5% by mid-1986.
- **Electricity:** Look for seasonal variations. And rising capital costs coupled with an expected 4.5% increase in the price of coal over the next year, could bring average second quarter tags up 4.5% over current levels.

Energy prices into early '86
(% change)



Source: Dept. of Energy

PW PREDICTS

Plastic resins

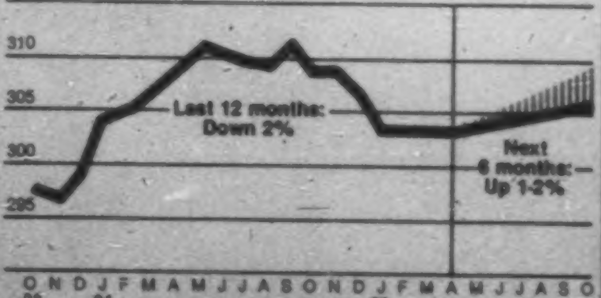
CURRENT SITUATION: Most commodity thermoplastics remain extremely soft. In most cases list prices are little more than the starting point for serious negotiations. Volume purchases of many resins can be had for 15¢/lb under book levels. The only plastic reasonably near list is ABS but even here, pipe grades are being shaded from 2-7¢/lb. Some downward pressure can be traced to weak feedstock quotes but the major factor is market competition.

DEMAND: Expect gains in the neighborhood of 3-4% this year—well under the 6% advance posted in 1984. There could also be some big variations on a resin-by-resin basis. These increases are seen for 1985: low density polyethylene (2%), high-density polyethylene (2.5%), polypropylene (5%), polystyrene (3%), and ABS (6%). Faster growth is projected for engineering plastics (about 8% annually through 1990)—partly due to the increasing use of CAD/CAM which is enabling cost-effective substitution of polymers for metals.

SUPPLY: No problems anywhere—given already low operating rates, modest demand gains, small additions to capacity, and declining exports. Lest there be any doubt about availability, look at these average operating rates projected for 1985: LDPE (80%), HDPE (87%), PP (87%), PS (66%), PVC (76%), and ABS (76%).

PRICE OUTLOOK: Modest attempts to boost market prices continue—2¢/lb hikes have recently been posted for polystyrene and polyethylene. **But chances of these and other similar increases sticking seem doubtful.** Current competitive conditions among vendors seem to preclude it. Prices will eventually turn around—probably around midyear if demand holds up and feedstock costs start edging up. Advances are still going to be in the modest 2-3% range.

Plastic resin prices
(Index: 1967 = 100)



Computers

Prices, prodded by competition and technological breakthroughs, continue to edge lower. Some signs of the times: (1) Macintosh systems (computer, external disc drive, and printer) have dropped as low as $2,165 (34% under list); (2) New desktop versions of IBM Series 1 computers start at only $3,130—less than half that of the larger types; (3) Amdahl has cut 6-12% off its J80 Series of mainframes; and (4) there's talk that the IBM PC-AT may begin to drop before too long as supplies increase and new competitive models hit the market.

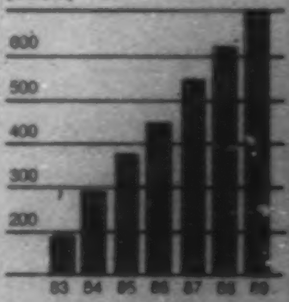
Lead

The heavy metal continues to back and fill in the under 20¢/lb range—and there's little to suggest any immediate change as worldwide demand stagnates. Domestic demand won't do more than equal last year's level—as battery demand lags and leaded gasoline is phased out. Possible strikes at Cominco and St. Joe could introduce a note of firming this spring, but but even that impact is likely to be minimal.

Robotics

Markets are starting to take off—albeit from a very small base. In 1984, for example, domestic shipments hit some $300 million—a big 50% jump over 1983 levels. And, because the average price per unit went down (from $74,000 to near $60,000), the number of robots increased by a greater amount. About 15,000 industrial robots are in place in the U.S. That's still under Japan's 30,000-plus. But, some catching up is likely as U.S. sales more than double to $700 million annually by 1989.

Robot sales
(Millions)



Chemical building blocks

Strong demand and snug supply have brought benzene contract tags up 5¢/gallon (to $1.25/gallon)—with spot quotes reported as high as $1.25/gallon. Higher tags are also ahead for vinyl chloride monomer where a new 2¢/lb increase will take prices as high as 21¢/lb—far above the 14¢/lb low of last fall. There are some soft spots, however. Cheap imports are keeping pressure on nitrile where discounts as high as 10% are noted. Also, the new 4¢/gal increase in

PW PREDICTS

Copper

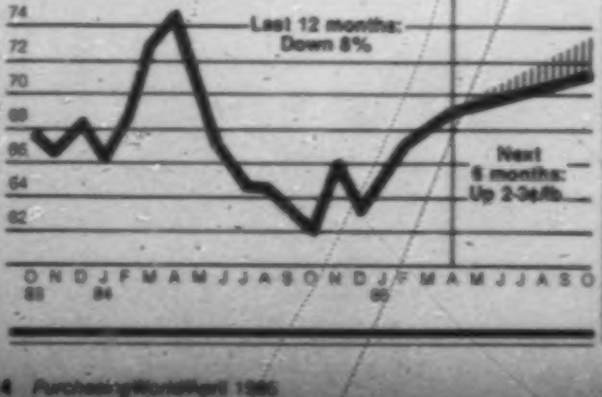
CURRENT SITUATION: Market fundamentals have improved considerably over the last few months—demand is up and inventories are down. On the latter score, both LME and Comex stocks have tumbled over the last 12 months (LME down 70% and Comex down 30%). Free World stocks are off 35%—falling from 1.5 million to only 0.95 million. **But despite all the above, the metal here in the U.S. has been unable to break through the mid-60's range** because of a strong U.S. dollar and continuing influx of low-priced imports from Third World countries.

DEMAND: 1985 should be another good year—after 1984 consumption advanced more than 10%. This year's gains won't be quite as spectacular **but a pickup in machinery should assure at least a 4% increase to 2.4 million tons.** However, the long-term prognosis isn't that great, as user trends toward substitution, miniaturization, and downsizing continue.

SUPPLY: Despite better market balance, there should be more than enough metal to go around this year. Reason: plenty of unused capacity, especially in the U.S. where mines are operating at less than 60% of potential. The Free World as a whole also has plenty of slack—more than 20% of global production currently idled with more mines on the way. Chile, (the largest producer) which produced 1.24 million metric tons last year, is talking about 1.5 million by 1990.

PRICE OUTLOOK: Several factors seem to indicate some near-term price firming: (1) the closing supply-demand gap, (2) the leveling off of the U.S. dollar, and (3) an intensifying profit squeeze. On the latter score, despite heroic cost-cutting efforts, the U.S. industry still needs a 70¢/lb plus price to get back into the black. **Best bet: an edging up toward this level by late spring or summer.**

Producer copper prices
(cents/lb.)



methanol could be in trouble—given the current capacity glut and new facilities that will soon be coming on stream.

Computer peripherals

New manufacturing techniques could reduce prices of hard disc drives. Quotes which averaged in the $1,800-1,900 range last year could be off as much as 25-50% before the year is out. Elsewhere, prices of modems are now expected to drop by 20-25% by the fourth quarter. Some manufacturers are already offering promotional incentives to move products in what is now characterized as a sluggish market.

Telephone rates

Long distance tabs could begin to fall if the FCC approves a new AT&T plan that offers 15% discounts on all direct-dialed interstate calls (available to all subscribers willing to pay a flat $25 monthly fee). The new plan, dubbed "Pro America," would yield savings to any customer with monthly bills in excess of $167/month. The move, if okayed, could prompt retaliation by competitors such as MCI and Sprint.

Paper

Some softness is still noted in some key sectors. $30/ton discounts are being reported in linerboard and heavy shading is being reported in market pulp. Uncoated white paper is not too strong either although prices here seem to have stabilized a bit as the import pace slackens a bit. There's also discounting in industrial tissue—and, on the east coast, in consumer tissue. A $29/ton boost is expected for newsprint, but it might not stick because of the competitive environment.

Zinc

Markets are firming—domestic metal now commands 2¢/lb more than it did a month ago and similar increases have been posted in die casting alloys. The European producer price is also up. Good demand is one factor behind the increase. But another could be Asarco's recent decision to quit the market. In any event, another 2¢/lb boost can't be ruled out for the next few months. No big jump is likely, as there's plenty of global capacity and U.S. consumption gains will be relatively modest (about 2-3%).

Semiconductors

Memory chips are tumbling. Spot sales of 64K dynamic RAMS, for example, are now going for as low as $1—half the quote of last October. Equally significant is that the more powerful 256K

Industrial price trends

Figure on continued small increases in industrial prices through 1985 and probably into 1986, says the latest Data Resources Inc. (DRI) quarterly *Cost Forecasting Service* report. Behind this optimism: (1) relatively modest demand gains of 3% at annual rate, (2) still-small wage hikes of 3.4% projected for this year and 4.5% projected for 1986, and (3) little or no energy inflation.

There does not seem to be a single major procurement area heading for double-digit advances. Projected increases for steel, industrial chemicals, construction materials, and machinery are pegged at 3% or less. And nonferrous metals could edge even lower.

While there could be some bigger hikes in individual items, things should remain under control through 1986. (See details for individual product lines in table.)

Price outlook in 1987
(Comparison of first quarter pricing)

Product	Percent change 85/84	Percent change 86/85	Percent change 87/86
Raw materials energy			
Industrial chemicals	−2.8	2.6	2.4
Miscellaneous chemicals	2.8	3.7	3.8
Pulp and paper	5.5	4.6	6.3
Intermediate supplies for manufacturing	3.0	4.4	5.4
Crude supplies	1.0	8.5	7.7
Middle distillates	−8.8	2.3	2.0
Metals			
Concrete rebars, carbon	4.4	7.1	5.3
Heavy structural shapes, carbon	2.5	4.3	9.0
Steel foundries	1.3	4.4	5.3
Lead, pig	−6.3	5.1	8.1
Zinc die casting alloy	−10.3	7.4	7.6
Copper & brass mill shapes	0.4	8.9	9.0
Components			
Tires	2.6	4.0	4.1
Hardware	2.7	3.5	4.2
Lighting fixtures	5.3	3.2	4.5
Valves & fittings	3.3	2.9	6.5
Abrasive products	2.0	3.9	4.4
Machine shop products	6.6	6.1	5.9
ICs (digital MOS)	−5.4	−1.5	−2.4
Construction items			
Plastic construction products	0.7	0.7	5.2
Insulation board	2.6	2.0	3.4
Structural metal products	3.5	4.4	7.6
Flat glass	−4.6	2.5	4.8
Concrete products	4.8	6.0	7.1
Machinery			
Heating equipment	4.2	4.5	5.1
Construction machinery	1.8	4.4	7.3
Material handling equipment	2.0	3.7	4.5
Motors & generators	2.0	6.0	7.7
Oil field equipment	0.8	2.9	6.1
Capacitors	1.7	2.1	6.8

Source: Data Resources Inc., Cost Forecasting Service

chip is also slipping too (into the $9-12 range). And there's talk that this price could drop to under $8 before the year is over. Discrete semiconductors have also been edging lower according to recent market reports.

Electronic components

Overcapacity, high user inventories, and sluggish demand will put new downward pressure on semiconductor tags. Overall averages could fall as much as 8-10% this year—and maybe even further in the case of computer memory chips. Dynamic RAMs, for one, continue to come down—with 64Ks now going for around $2—about half last year's level. EEPROM quotes are also dropping. Declines of about 20% have been reported in some cases.

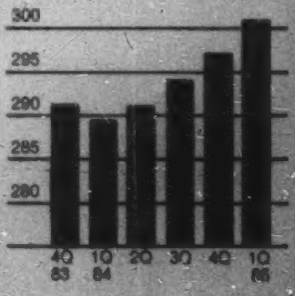
Aluminum

Prices are still soft and market ingot is still in the low 50¢/lb range. Adding to the downward pressure are low-priced imports. But things should begin to turn around by late spring as U.S. production cutbacks (mills are now operating at less than 75% of potential) are felt and demand picks up. On the latter score, all signs indicate a 4-5% consumption gain here in the U.S. Also firming prices: (1) falling inventories (global stocks could be off as much as 600,000 metric tons this year), and (2) cost pressures. Best bet: ingot tags should climb above 60¢/lb by summer and should remain there for the rest of the year.

Inorganic chemicals

Modest increases are cropping up. Sulfur is being boosted $5/ton (to $162.50/ton, FOB Tampa)—an increase that could put new upward pressure on sulphuric acid and other key sulphur derivatives. Chlorine is also firming. Off-list prices are scheduled to rise another $10/ton. Potash is also likely to advance by about $10/ton into the $65-75/ton range this spring due to low consumer inventories and an expected 5-6% increase in 1985 global demand.

Inorganic chemical prices
(Index: 1967 = 100)



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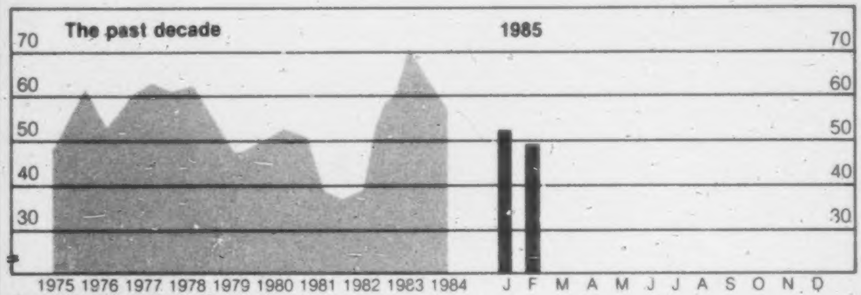
BUSINESS DATATRAK

NAPM business barometer

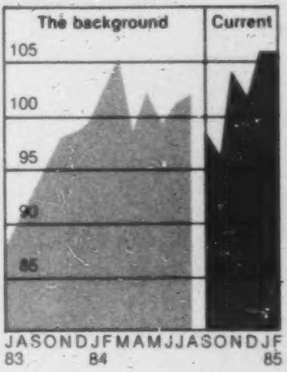
Based on five indicators (employment, inventories, new orders, production, vendor performance)



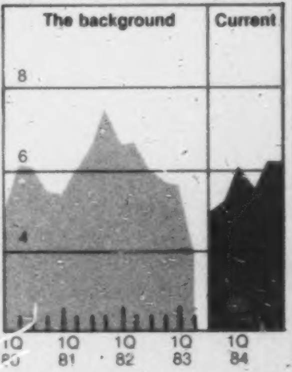
Source: Commerce Dept.

Leading indicators

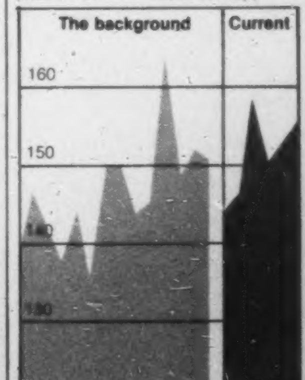
1. Durable goods orders
(Billion $, seas. adj.)



2. Savings rate
(% of income, seas. adj.)



3. Construction awards
(Index: 1977 = 100, seas. adj.)



KEY ECONOMIC TRENDS

Doomsayers will have to wait, 1985 looks good

The year is beginning to look better and better.

While no one expects a repeat of last year's 6.8% real GNP advance, all signs point to continuing gains for the upcoming second quarter and probably for the rest of year.

A recent query of top economists reveals expectations of a 4.0% annual growth rate for the first half of the year and around a 3.0% rate for the July-December half. This averages out to 3.5% growth for the year.

Further confirmation of this advance rate comes from the big econometric models which are forecasting gains in the 2-4% range for 1985. The consensus is that there is enough momentum to keep business in the plus column for some time to come.

Leading economic barometers suggest the same. True, the NAPM barometer (see chart) is currently in the neutral 50 range, but talks with government economists who work up this figure indicate that this is probably a one month blip and that the second quarter readings will be moving back up into the mid-50s range.

More detailed barometers seem to support this view. Durable goods orders (see chart) remain on a high plateau, having recovered a bit from their recent pause with a 3% increase over fourth quarter 1984 averages.

And the capital goods sector of the durable orders may actually begin to rise because capital appropriations (leading indicator of machinery orders) are again in a rising trend. The latest quarterly total comes to near $29 billion—an advance of 5% over levels of three months ago.

Equally significant, this appropriations yardstick is expected to continue advancing. The Conference Board, compiler of this series, sees appropriations up another 7% this year—enough to generate a 34% increase in capital spending by the nation's 1,000 largest manufacturers.

And it looks like the consumer sector of the economy will remain robust. Even though families are saving a bit more of their take-home pay these days (see chart), the percentage is not nearly as much as in 1981-82—and the income pie is a lot bigger than it was then.

As for consumer optimism, 8.8% of the households surveyed say they are planning on buying a car over the next six months—relatively unchanged from previous readings. And plans to buy major appliances are on the rise.

Even worries about construction are fading as building awards pick up (see chart) and mortgage rates edge lower. The latter has also been a major factor in increases in housing starts forecasts for 1985—from 1.6-1.7 million units to 1.8 million now.

Finally, there is the surprisingly low level of inventories. Most key stock-sales ratios are close to all-time lows, indicating that any additions to final demand won't be coming from shelves, but from increases in industrial production.

Car driving costs go up and up and up

Owning and operating a car doesn't come cheap these days.

A just-released study by Hertz shows that recent increases in sticker prices (up 9% for a typically equipped compact) and high interest rates have raised cents-per-mile costs an average of 5.5% above last year's levels.

Details for a 1984 model, purchased new and driven 10,000 miles a year for five years, are shown in the accompanying chart. The pertinent cents-per-mile figures: subcompact (36.6¢), compact (45.7¢), midsize (48.6¢), intermediate (50.2¢), and standard (59.8¢).

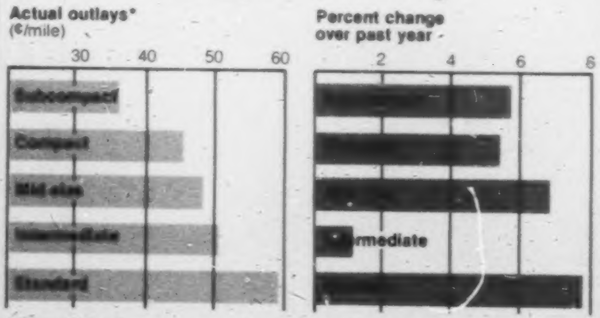
These estimates can, of course, change significantly according to the number of years the car is kept. Specifically, the longer the car is owned, the lower the cents-per-mile. Holding on to a car for ten years instead of five (driving 10,000 miles per year) can save anywhere from 16-25% off these overall costs.

Obviously, the more miles driven per year, the lower the cost per mile. For example, a car held for five years driven only 5,000 miles per year, averages out to 79.5¢ per mile, while the same car driven 20,000 miles a year averages out over five years at only 29.3¢ per mile.

Other key findings of the Hertz survey:

- New cars are kept an average of 5.2 years vs 3.6 years a decade ago.
- The average age of all cars in use today is 7.4 years vs 5.7 years a decade ago.
- Owning and operating a used car rather than a new one can save you anywhere from 20-50%.

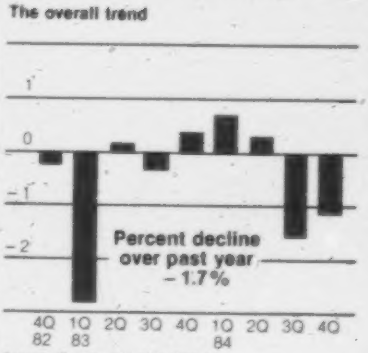
The high cost of driving



* Ownership and operating costs of a new car that is driven 10,000 miles per year and is held for five years

Source: Hertz Corp

Import tags drop again



Source: Bureau of Labor Statistics

The big bargains
(% change over past year)

Crude oil	-3.5
Nonferrous metals	-7.9
Textile Mchy.	-4.2
Metalwork. Mchy.	-6.1
Heating & cooling eqpt.	-5.6
Pumps & compressors	-5.4
Mech. handling eqpt.	-5.1
Bearings	-4.3
Office mchy.	-7.7
Electric mchy.	-9.8
Electronic compon.	-17.4
Scientific instru.	-4.8

Offshore bargains unabated

During the latest available quarter tags fell by 1%, nearly duplicating the decline in import prices in the previous quarter. The continuing strong dollar is, in part, responsible for the dips in offshore prices. Averages are now down 2% from year-ago levels. Some key industrial areas are even even lower (see chart for details).

Another significant contributor to this widening U.S.-overseas price gap is that comparable domestic product lines have been holding steady or even edging up a bit.

Here's a more detailed rundown of developments over the latest three-month period:

- **Crude materials:** Big declines were posted in crude rubber (7.6%), pulp and wastepaper (3.2%), metal ores (6.0%), and crude oil (2.9%).
- **Chemicals and related products:** Price averages were down for the third consecutive quarter—with hefty declines noted for fertilizers (5.7%), fats and oils (7.6%), and miscellaneous chemicals (2.5%).
- **Intermediate manufacturing products:** Nonferrous metals—off 3.2%—headed the trend toward lower tags, with additional downward pressure coming from leather, cork, wood, woven cotton fabrics, fasteners, and iron and steel.
- **Equipment:** Largest 3-month declines were in telecommunication equipment (2.5%), metalworking machinery (2.4%), office equipment (2.0%), and instruments (2.8%). But autos were up—reflecting year-end model changeovers.

CURRENT PRICES

Energy drops prices lower

Overall industrial producer prices continue to edge lower—aided in large part by new declines in energy.

The falloff in the last month was relatively small—only 2%, or 2.4% at annual rate. But this is extremely encouraging in light of the fact that demand for most of the goods monitored continues to expand.

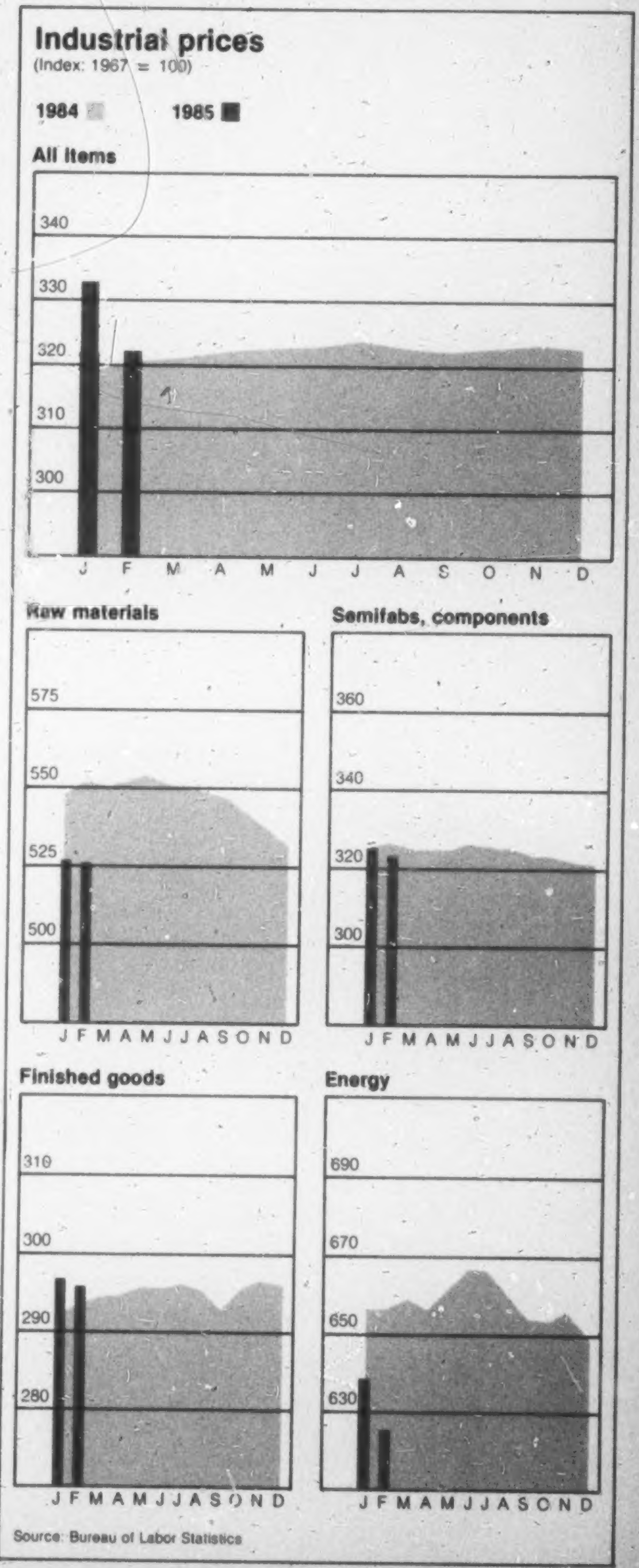
The latest drop in some specific areas in energy has been fairly substantial. Liquid petroleum, for example, is now at its lowest level since November 1979. Other declines over the last month were noted in gasoline, diesel fuel, residual fuel oil, lube oils, kerosene, and crude petroleum.

Some of these products are now significantly under where they were last year at this time. Examples: gasoline is off nearly 10% and lube oils dropped 3%.

The decline in basic petroleum could also be a major factor in the continued easiness in organic chemicals where averages fell by almost 1% in the last 30 days. This was more than enough to offset some edging up in inorganic chemicals (chlorine and sulphur), thus creating another decline in overall

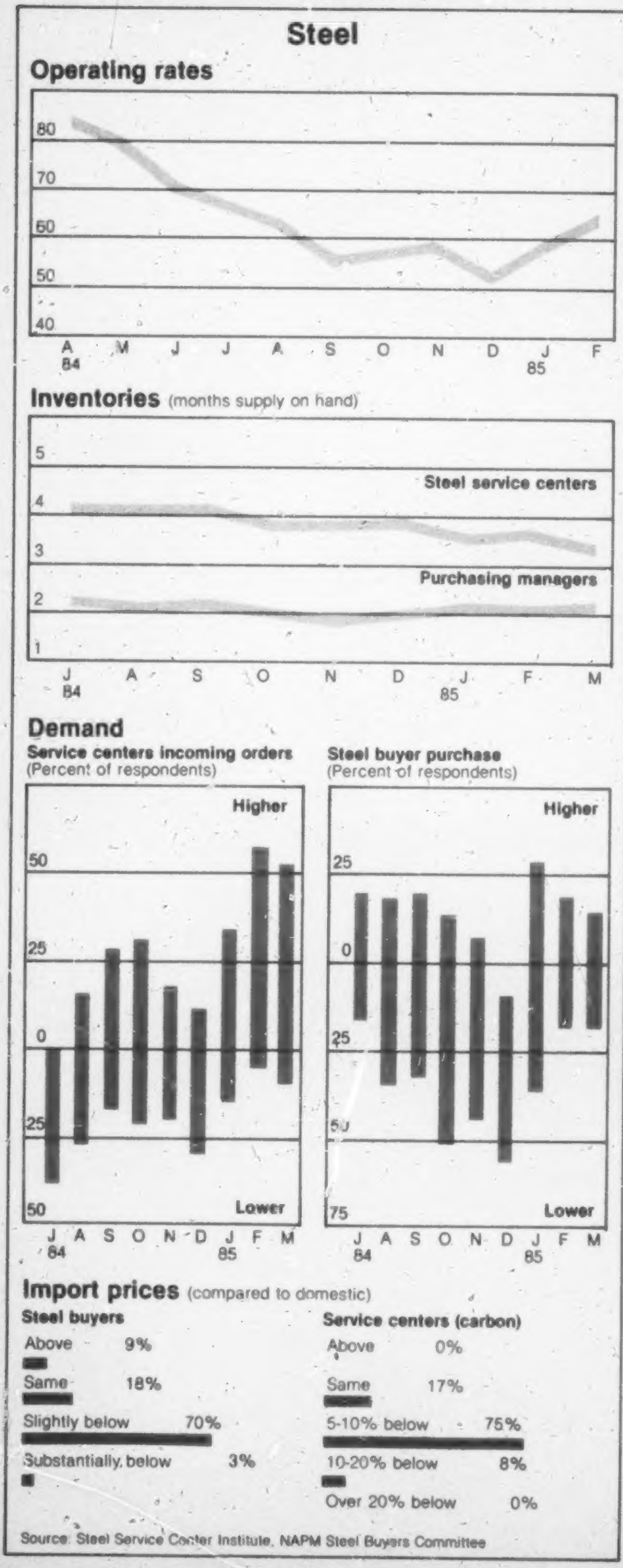
This month's breakdown

	Latest level (Feb.)	% change from: Month ago	Year ago
Bearings	346.0	0.1	2.9
Bolts, nuts, etc	278.9	−1.4	2.5
Chemicals, inorganic	300.9	0.5	4.6
Chemicals, organic	351.6	−0.9	−2.7
Concrete products	314.3	−0.2	2.7
Corrugated cartons	284.4	1.1	13.0
Cutting tools, small	285.7	−0.1	2.3
Electric lamps (bulbs)	342.8	0.9	3.2
Electronic components	198.6	0.4	4.3
Fans and blowers	357.4	0.1	4.6
Foundry and forge products	363.6	0.0	2.0
Fuel oil (residual)	1107.3	−1.8	1.3
Furniture, commercial	302.3	0.7	2.6
Gasoline	508.2	−4.3	−9.7
Glass, flat	220.9	0.0	−3.9
Glass containers	364.2	0.1	3.9
Gypsum products	330.2	0.5	−2.7
Hand tools	371.7	0.6	4.9
Hand tools, power driven	232.9	1.5	4.6
Industrial furnaces	382.4	0.2	3.2
Integrating and measuring instruments	231.4	0.7	2.0
Internal combustion engines	346.6	0.3	2.5
Lubricating oil	772.2	−2.7	−3.2
Lumber millwork	311.5	−0.3	0.9
Material handling equipment	292.9	0.2	1.9
Metal containers	358.3	0.2	3.9
Metal mill shapes (nonferrous)	315.0	0.7	−1.9
Metal tanks	305.6	0.3	0.3
Motors and generators	348.5	−0.1	3.2
Motor trucks	296.1	0.6	5.4
Office and store equipment	153.7	0.0	−0.1
Paperboard	287.7	−0.4	5.9
Paper boxes and shipping containers	276.7	1.2	8.6
Paper office supplies	243.4	−0.5	4.2
Paint	279.0	0.3	4.4
Plastic resins	306.8	1.3	0.6
Precision measuring tools	255.9	0.0	4.3
Pumps and compressors	353.1	0.0	1.8
Refractories	367.0	0.0	3.1
Rubber belts and belting	355.8	3.9	2.1
Scales and balances	230.1	−1.4	0.2
Steel products	364.4	−0.1	1.1
Switchgear	276.0	0.1	0.3
Textiles, synthetic fibers	157.7	0.1	−2.3
Textiles, gray fabrics	153.1	−0.3	0.2
Tires and tubes	240.8	−1.8	−1.2
Transformers and power regulators	233.1	1.4	4.5
Welding equipment	286.5	0.3	1.3
Wire and cable	204.3	1.5	0.9



Source: Bureau of Labor Statistics

BUSINESS DATATRAK


Steel

Source: Steel Service Center Institute, NAPM Steel Buyers Committee

industrial chemicals.

Some softness was also noted in building materials, especially plywood, softwood lumber, plastic construction products, concrete products, and asphalt paving mixture. The same is true in other basic materials including lead, aluminum scrap, raw cotton, natural rubber, paper, paperboard, and inedible fats and oils.

The easiness also seems to be extending to some highly fabricated sectors, with declines noted in fasteners, tires and tubes, motor vehicle parts, and grey textile fabrics.

On the other hand, some uptick is noted in the capital goods sector, probably the result of a recent step up in equipment ordering. Small increases were noted in transformers, railroad equipment, food machinery, power driven hand tools, and instruments.

STEEL SCENE

JIT a hit with steel service centers

There is some difference of opinion as to where the steel market is heading over the next few months. Distributors responding to the latest Steel Service Center Institute (SSCI) survey, for example, feel some solid gains are likely. But buyers are basically neutral, seeing little overall change in the demands.

The service center optimism can best be appreciated by the fact that more than half of those queried see a pickup in incoming orders over the next three months—more than seven times the 7% who feel some slippage is likely.

Contrast the above to the latest NAPM buyer survey where the 15% plan to increase their steel orders is effectively offset by 18% who feel they will be buying less.

One reason for the more optimistic service center outlook could be the nation's increasing reliance on distributors to meet just-in-time inventory goals—a development which has tended to increase service centers' overall share of the market.

Most service centers are confident they'll break last year's shipment peak when they moved some 21 million tons. How much gain in 1985? Estimates vary, but they generally average out near 22 million tons.

Some other findings from these just-completed surveys:

- **Inventories:** Steel service center month's supply has dropped a bit over the past month (see chart). Moreover, these sellers would like to see this ratio drop even further in the months immediately ahead. But given customer demand for quick deliveries, this seems little more than wishful thinking.

Buyers also seem interested in cutting back on stocks. So far, however, they have not been all that successful—with the supply figure hovering just around the 2-month mark for almost a year now.

But these buyers intend

to keep trying. Thus 41% of those queried say they will be attempting to cut steel inventories over the next six months.

- **Availability:** Service centers see the situation as being easy over the next few months. The picture is much the same on the buyer level—with only scattered worries voiced.
- **Imports:** Current high tonnage totals seem to indicate that service centers and buyers are taking advantage of overseas bargains. On the price front, for example, 73% of buyers say imports are under comparable domestic levels—with 3% saying the price advantage is substantial.

Service center figures are even more impressive. In both carbon and stainless more than four out of five respondents say foreign prices are lower—with 8% of those buying carbon steel and 42% of those buying stainless putting the price break in the 11-20% range.

But new import quotas could make it increasingly difficult to continue finding such bargains. Not surprising then, some 44% of the service centers anticipate a reduced dependency on imports over the next six months (vs only 4% who see increased dependency).

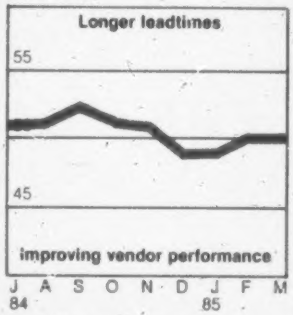
And on the buyer front the figures are almost as impressive—with 24% anticipating reduced dependency (vs only 9% planning on increasing imports).

In short, a significant shift in steel sourcing could well be in the making.

Monthly procurement status report

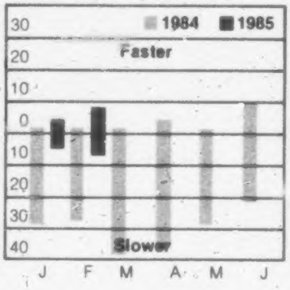
Leadtime index

A "diffusion" index based on 158 key commodities. Avove "50" indicates a tendency for leadtimes to stretch out. Below "50" suggests improving vendor performance.

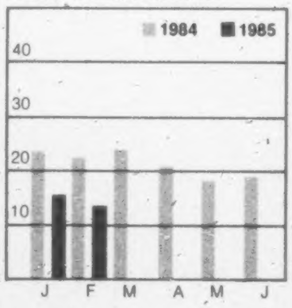


Delivery performance

(Percent reporting deliveries)

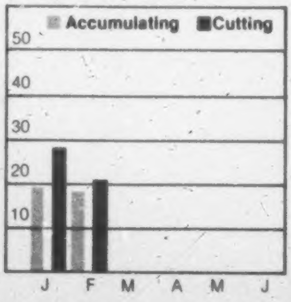


Forward commitments



Inventory strategy

(Percent of respondents)



Source: NAPM

PROCUREMENT STATUS

No problem gettin'; glut in electronics

Procurement headaches remain few and far between despite an economy that has been growing steadily for more than two years.

That seems to be the thinking of virtually all buyers. This continuing good news is attributable to a combination of factors: (1) still more-than-ample capacity, (2) growing imports which are adding to the overall supply base, and (3) better buyer-seller coordination.

Granted, there have been a few modest leadtime stretchouts. But, generally, they have been balanced out by shrinkages in other sectors. *PW*'s exclusive leadtime index (see chart) remains squarely anchored at the neutral 50 level.

And most purchasing executives queried in *PW*'s new procurement status survey see the same pattern persisting through spring and summer. Observes one PM, "There's absolutely nothing on the horizon to indicate any change. In fact, the few items that have been tight—namely electronic parts—are now a glut on the market."

The fact that vendors have been speeding deliveries is still further confirmation of this "no sweat" prognosis. According to tabulations by the NAPM Business Survey Committee, for example, more buyers are getting faster deliveries than are expecting slowdowns.

Also suggesting clear sailing is the fact that PMs, despite rising production schedules, are paring more than accumulating.

Recent easiness in the price sphere can also be traced back to the ample or more-than-ample supply situation. Here, too, the figures are impressive—the 18% reporting declines outnumbered those hit with increases by better than 2:1.

Perhaps the most noteworthy development this month is that there is now not one single item on the NAPM short-supply list.

Leadtimes and availability

Chicago: Coming in (weekly leads): resistors (8-12), integrated circuits (20-39), thermistors (8-12), chrome chemicals (1-5), wide coated steel sheet (7), special brass sheet (4-5). Moving out are PVC (6), c-r and narrow coated sheets (7), special copper sheet/tube (3-4).

Cleveland: Coil coating paint is in (to 4-5). Other weekly leads: 2-ply fiber drums (2), corrugated boxes (3), folding boxes (4), polyethylene and PVC (3-4), cold-finished aluminum (10-12), lumber (3), skids (3), plastic packaging material (2-3), alloying material (on demand).

Los Angeles: Copper tubing is out (to 6-8). So are custom storage tanks (6-8), electro-mechanical components (6-8). In are grey iron castings (4-6), brass castings (8-10), aluminum pipe (12), heavy duty electronics (26-52), galvanized steel (12-14), domestic fasteners (4-6).

BUSINESS DATATRAK

Houston: Pumps are in (to 5-9 months). Alloy carbon steel heat exchangers are out to 4-6 months. Other weekly leads: High-density polyethylene (2-3), polypropylene (2-3), corrugated (2), galvanized steel coils (10), stainless fasteners (8-10), plastic bottles (4).

Philadelphia: Connector leads are in (10-12). Other leads: relays (6-10), fractional hp motors (10-14), switches (6-10), rechargeable batteries (2-8), file effect transistors (8-10), large scale ICs (14-16), LTL ICs (14-16), multi-conductor cable (8-10), CMOS ICs (16-18), wirebound resistors (8).

Pittsburgh: Silicon is in (2 weeks)—to levels of most alloying materials. Other typical leads (in weeks): mill quantities of fabricated copper (6), polyethylene (5), PVC (6), corrugated and folding boxes (3-4), drums (1), paint (4-5), steel strapping (2-3), painted seals (6-8).

Leadtimes (in weeks)

	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	4½	4½	9
C-R Sheet (Chgo)	7	6	5
Plate (Phil)	3½	3½	10
Plate (Chgo)	2½	2½	2½
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	7	7	7
H-R Bars (Chgo)	3	3	3
Cold-Drawn Bars (Phil)	7	7	7
Galvanized (LA)	13	14	14
Galvanized (Chgo)	7	6	10
Structurals (Chgo)	4½	4½	3½
Structurals (Hous)	17	17	17
Tubing (Phil)	7	7	7
Grey Iron Castings (LA)	5	7½	5
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	6	6	6
Pipe, Carbon (Hous)	13	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	13	13	17
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	7	7	7
ICs (Linear) (Phil)	15	17	20
Motors (Phil)	12	15	15
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	10	10	20
Relays (Chgo)	15	15	15
Resistors (Chgo)	10	12	14
Resistors, Wirebound (Phil)	8	10	10
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	2	2	2
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	⅕	⅕	⅕
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Napthalene (Chgo)	2	2	2
Paint (LA)	4	5	5
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	3	3	3½
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	3	3	3
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	6	6	1
PVC Resin (Pgh)	6	6	6
Titanium Dioxide (LA)	1	1	1

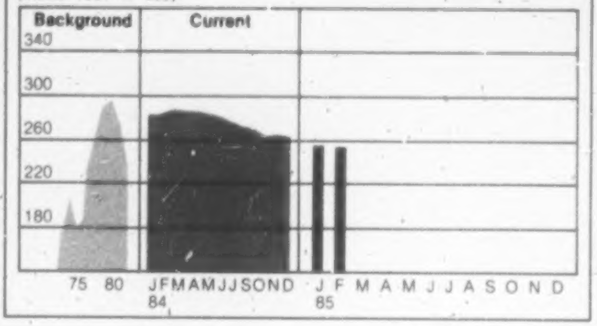
	Now	Month ago	Six months ago
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	3	3	3
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	6	6	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON FERROUS			
Aluminum Coil (Chgo)	11	11	11
Aluminum Plate (Chgo)	12	12	14
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	11	11	11
Brass Castings (LA)	6	9	7
Brass Rods (Chgo)	4	4	6
Brass Sheet (Chgo)	4½	7	9
Brass Tube (Chgo)	6½	6½	5
Copper Fittings (LA)	3½	3½	3½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	7	5½	5½
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	2	2	4
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	5	5	5
Zinc (Pgh)	2	2	2
MISCELLANEOUS			
Bearings, Domestic (Phil)	22	22	22
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	50	50	50
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	1½	1½	1½
Fasteners (LA)	5	7	7
Fasteners, Std. (Phil)	4	4	2½
Heat Exchangers, Carbon-alloy Steel (Hous)	21	20	20
Heat Exchangers, Hi-pressure (Hous)	31	31	35
Insulation Mat'l. (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	2½	2½	2
Pumps (Hous)	30	35	35
Pumps (LA)	9	9	9
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	17	17	17
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Latest month **254.0**
Month before **255.8**
Year ago **283.6**

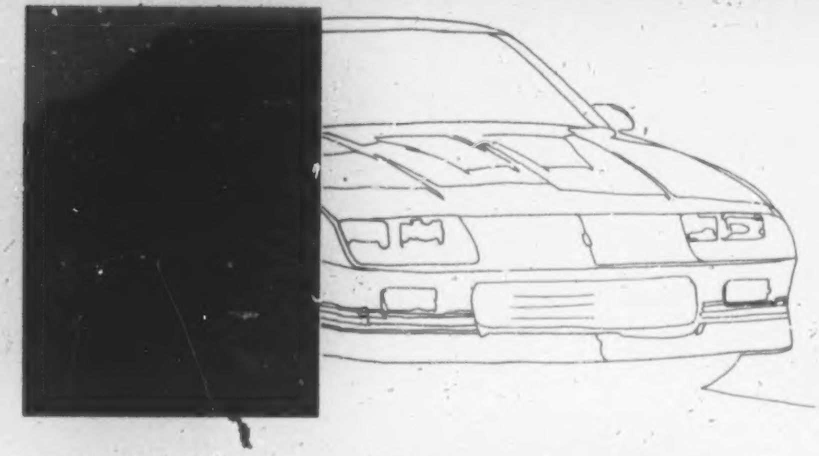
(Index: 1967 = 100)



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	347.00
Steel, structural shapes, Pitts., cwt	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt	25.10	25.10	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	23.95	23.95	17.50
Steel, bars, Pitts., cwt	23.95	23.95	17.50
Steel, bars, C.R., Pitts., cwt	29.25	29.25	26.00
Steel, plates, Pitts., cwt	23.95	23.25	23.25
Steel, plates, H.R., Pitts., cwt	23.25	23.25	23.25
Steel, sheets, C.R., Detroit, cwt	27.10	27.10	27.10
Steel, strip, C.R., Chi., cwt	35.30	35.30	35.30
Steel, basic wire, Pitts., cwt	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.513	0.510	0.715
Antimony, in alloy, lb	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb	5.35	5.35	5.20
Brass, red, 85%, [sheet], lb	1.27	1.28	1.25
Brass, yellow, [sheet], lb	1.22	1.23	1.20
Cadmium, ton lots, lb	1.25	1.25	1.50
Copper, electrolytic, wire bars refd., lb	0.64	0.65	0.70
Copper, sheet, over 24 in., lb	1.36	1.37	1.34
Lead, common, N.Y., lb	0.17	0.19	0.24
Magnesium, pig ingot, [99.8%], lb	1.48	1.48	1.43
Mercury, 20 fl. lots, N.Y., fl	304.00	310.00	300.00
Molybdenum Climax Oxide/bags, lb	4.65	4.65	4.65
Nickel, electrolytic, producer, lb	3.20	3.20	3.20
Platinum, producer, oz	475.00	475.00	475.00
Silver, N.Y., oz	5.75	6.10	9.82
Tin, Straights, N.Y., lb	5.60	5.65	6.45
Zinc, Prime West, East St. Louis, lb	0.45	0.43	0.51
Zinc, die casting alloy, No. 3, lb	0.515	0.495	0.575
PAPER			
Uncoated book #3 offset, ton	850.00	850.00	810.00
Watermarked bond, ton	985.00	985.00	985.00
Gummed sealing tape, carton	16.25	16.25	15.45
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	495.00	495.00	475.00
Wrapping paper, std. distributor cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	320.00	320.00	320.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd	0.361	0.383	0.306
Cotton drill, 1.85, 59", 68x49, N.Y., yd	1.03	1.03	1.03
Cotton middling, 1", N.Y., lb	0.620	0.598	0.733
Printcloth, 48", 80x80, N.Y., spot, yd	0.68	0.71	0.80
Army duck, 37", 13 oz., yd	1.96	1.96	1.79
Blended printcloth, 64", 78x54, yd	0.740	0.740	0.725
20s combed yarns	1.95	2.12	2.14
Wool tops, N.Y., lb	3.60	3.60	3.60
CHEMICALS			
Acrylonitrile, tanks, lb	0.455	0.455	0.430
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	210.00
Benzene, petroleum, tanks, Houston, gal	1.23	1.17	1.43
Caustic soda, 76% solid, drums, carlots, cwt	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb	0.58	0.58	0.58
Formaldehyde, USP, 37% [12% to 15% meth.], tanks, lb	0.106	0.106	0.106
Glycerine, synthetic, tanks, lb	0.86	0.86	0.81
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.54	0.54	0.45
Naphthalene, crude, tanks, lb	0.22	0.22	0.22
Phthalic anhydride, tanks, lb	0.305	0.305	0.305
Polyethylene resin, low density liner film grade (market price), lb	0.28	0.29	0.42
Polypropylene, homopolymer grade (market price), lb	0.33	0.34	0.40
Polystyrene, general purpose grade (market price) lb	0.34	0.35	0.42
Shellac, bone dry, N.Y., lb	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb	0.26	0.35	0.35
Sulphur, crude, ex-terminal, Tampa, Fla., lt	162.50	162.50	140.00
Sulphuric acid, 66%, commercial, tanks, ton	56.85	56.85	56.35
Titanium dioxide, anatase, reg., carlots lb	0.69	0.69	0.69
Xylene tanks, gal	1.26	1.26	1.35
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	303.15	301.70	316.85
Lumber, 2x2, pine, mbf, cl	301.70	300.40	315.30
Plywood, plyform, ¾", msf, cl	569.65	563.00	562.05
Plywood, ⅜", msf, cl	375.35	375.10	364.10
Cement, bulk, ton, tl	64.46	64.46	62.44
Sand, ton, cl	6.20	6.20	6.13
Ready-mix concrete, 3,000 psi/cu.yd., 15 cu. yd	47.56	47.66	45.47
Crushed stone, 1½", ton, cl	7.52	7.52	7.87
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.79	0.79	0.76
Gypsum sheathing, ½"x1"x8", msf, tl	206.69	205.44	199.34
Brick, common, per thousand, tl	179.89	179.15	172.78
Asphalt paving, AC-20	174.64	173.17	163.54
Concrete sewer pipe, 12", prem. joint, per foot, cl	7.19	6.97	6.79
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl	25.50	26.25	24.75
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	31.25	31.00	32.15
Gasoline, 91 oct., reg., Los Angeles, rack, gal	0.785	0.725	0.790
Gasoline, 94 oct., reg., Chi., tank car, gal	0.740	0.699	0.805
Heating oil, No. 2, Chi., bulk, gal	0.730	0.730	0.789
Heating oil, No. 2, N.Y., bulk, gal	0.808	0.808	0.838
Heavy fuel, PS 400, Los Angeles, rack, bbl	26.50	26.50	26.25
Jet kerosene, gal	0.748	0.770	0.795
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.365	0.388	0.440
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	92.00	87.00	100.00
Steel, No. 1, hvy., dlvd., Chi., ton	84.00	81.00	88.00
Copper, No. 1, East, wholesale buy, dlvd., lb	0.545	0.560	0.625
Copper, No. 2, East, wholesale buy,	0.460	0.475	0.530
Brass, red, East, wholesale buy, dlvd., lb	0.505	0.520	0.585
Brass, yellow, East, wholesale buy, dlvd., lb	0.340	0.340	0.383
Alum., old sheet/cast, E., wholesale buy, dlvd., lb	0.340	0.335	0.495
Alum., mixed clip., E., wholesale buy, dlvd., lb	0.360	0.350	0.510
Zinc, old, East, wholesale buy, dlvd., lb	0.140	0.140	0.185
Lead, clean solids, East, wholesale buy, dlvd., lb	0.090	0.110	0.140
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	20.00	15.00	30.00
Paper, old corrug. box, dlr., N.Y., ton	10.00	10.00	27.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb	0.12	0.12	0.13
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb	0.30	0.34	0.34

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]



Quality tops list on survey of automotive purchasing

Here's the latest thinking of automotive buyers according to Ward's Auto World, a sister publication of PurchasingWorld magazine. Quality, a shrinking domestic supplier base, more single sourcing, more sourcing from abroad, and longer term commitments highlight responses of purchasing pros at the auto companies.

Jon Lowell, senior editor,
Ward's Auto World

It's one thing to write a song—quite another to get the choir to sing it. But results of *Wards Auto World's* survey of auto-company purchasing managers suggests that, if quality is the industry's national anthem, the people who buy the bits and pieces that make up the cars are standing at attention and singing at the top of their lungs.

Belting out the tune composed by their chief executives during the 1979-82 recession, no less than 81% of those surveyed list quality as priority No. 1 in the buying they do for their companies. Price, not so long ago the principal allegiance of buyers across the land, now is most important only to a tepid 7%.

"One word can sum up the direction of the auto industry and its suppliers—*quality,*" says senior buyer Thomas E. Wieczorek of General Motors Corp.'s Buick-Oldsmobile-Cadillac Group. "Suppliers are being involved earlier, and specifications mirror the functionality of the part. Buyers are becoming very technically oriented. Bottom line buying dollars will become a thing of the past. Again, in one word, quality."

Plenty of agreement among PMs

Overall, the responses to *WAW's* survey depict a fairly healthy environment—general agreement on the problems and goals for purchasing people and, at least in the broadest sense, agreement on the direction the industry is headed.

More than 100 auto-industry purchasing people, representing U.S.-headquartered manufacturers and American operations of foreign automakers, responded to the survey. Comments could be labeled on or off the record; some respondents returned their forms without divulging their employer's name. There was ample opportunity, in short, for candor.

Stated simply, people connected to automotive purchasing organizations expect to deal with far fewer suppliers. And they predict that those vendors who remain will enjoy longer-term contracts and will increase their deliveries of products from non-U.S. sources.

That's not to say the relationships won't remain at arm's length. "They (suppliers) have got to be good," says one purchasing-group controller. "Burn me once, (and) they're gone."

Trailing behind high quality and competitive price among prerequisites for suppliers to win business are use of statistical process control (SPC) (the #1 priority of 4%), engineering support (3%), innovative or proprietary technology (3%), yearly productivity gains (0.9%), and just-in-time delivery (0.9%).

Weighting the votes to reflect the overall rank of each buying criterion (see chart), quality remains on top with 23.1%, followed by price (15.5%), SPC (14.1%), engineering support (12.9%), just-in-time delivery (11.8%), yearly productivity gains (11.3%), and innovative or proprietary technology (10.1%).

Purchasing is more sophisticated

It's a given in the minds of practically everyone surveyed that the role of purchasing executives has evolved into something more complex and sophisticated than it was during the era of simply shopping for the lowest possible price. But opinions differ over whether auto companies are in this for the long haul or simply for a few laps around the track.

Industry purchasers seem convinced the changes will endure; fully 92% say so. But a less overwhelming majority (72%) think their suppliers feel the same way. "(There are) still too many glad-handers with minimum technical knowledge," writes an American Motors Corp. purchaser. A Ford Motor Co. buyer complains of "all new people in areas they aren't accustomed to."

Nonetheless, two-thirds of respondents say the quality of vendor

...continued

salesmanship is improving. Given marketplace demands, one GM buyer notes, a company hoping to remain on the shrinking list of suppliers must field better-trained salespeople.

Confirming that the supplier shakeout will continue, a whopping 93% predict some reduction in the automotive-vendor base. In fact, 65% of those surveyed expect supplier ranks to fall 15-30% by 1990. "I think some suppliers have the message, but others have a long way to go," sighs a Ford purchaser.

Not only will the number of suppliers shrink, but fewer of them will be American, poll participants say. No less than 80% expect foreign sourcing to increase during the next five years; only 4% anticipate a decrease.

Japan tops list

In the collective mind of *WAW* respondents, Japan will be the leading source of imported components for U.S.-assembled vehicles five years from now. The weighted survey results list Mexico second, Canada third, West Germany fourth, South Korea—a negligible source today—fifth, South America sixth, France seventh, and Great Britain eighth. The tally of first-place votes is similar, with Japan the pick of 47%, Canada (at 26%) and Mexico (at 16%) trading places, and the other regions at 3% each or less (no one lists Great Britain No. 1).

"The source of automotive materials will depend on the relative attractiveness—quality, cost, delivery, innovation—of a U.S. company's products," suggests a Ford procurement supervisor.

A production control coordinator at GM's Oldsmobile Div. accepts the need for increased outsourcing, even though it concerns him. "I don't like it, but increased technology demands it," observes David M. Ording.

New suppliers' chances good

One clear message of the 1985 *WAW* purchasing survey is that auto companies have thrown their doors wide open to suppliers with a better mousetrap.

Asked whether his or her company now is more likely to consider awarding business to independent suppliers than it was a few years ago, 75% say yes. More than one off-the-record comment suggests that careers now are being built around finding new ways to meet changing supply demands.

GM's Mr. Ording says that, presented the opportunity, he would "give suppliers twice as much responsibility as they (have) now."

But his opinion isn't universal. A Ford purchasing specialist flatly says no when asked the same question. "As much as possible," he explains, "we prefer to exert optimum control over production."

The closest thing to a debate in the survey arises from questions about inventory-reducing, quality-enhancing just-in-time parts delivery.

Some 75% of those polled call just-in-time a practical way to operate an American auto plant. But opinion is split almost evenly (47% yes, 53% no) on whether foreign sourcing conflicts with just-in-time.

"Just-in-time is impossible from foreign sources; it's not dependable," declares a GM purchasing executive. Not so, argues Ford Buyer J.D. Panning: "Foreign sources operate local warehouses."

The crunch American manufacturers and their suppliers find themselves in amid escalating quality-

Q&A with automotive buyers

Here's how the auto pros answered the Ward's Auto World survey.

1. Please rank in order of importance (1 being the highest) what suppliers need these days to win business at your company:

Category	1st choice	Wgted for all	Rank
Quality parts	81%	23.1%	1
Low price	7%	15.5%	2
Statistical process control	4%	14.1%	3
Engineering support	3%	12.9%	4
JIT delivery	0.9%	11.8%	5
Yearly prod. gains	0.9%	11.3%	6
Innovative and/or proprietary technology	3%	10.1%	7
Other	—	1.2%	8

From what you have seen, do suppliers think these changes are:
Permanent (72%), Temporary (15%), Don't know (13%)

Do you think these changes are:
Permanent (92%), Temporary (6%), Don't know (2%)

2. By 1990 there will be (   ) suppliers to the U.S. auto industry:
More (7%), Fewer (90%), Same (3%)

Percentage change you predict:
5% more—1%
10% more—2%
15% more—2%
30% more—2%
5% fewer— 1%
10% fewer—13%
15% fewer—10%
20% fewer—26%
25% fewer—18%
30% fewer—11%
40% fewer— 5%
50% fewer— 8%

3. Is the overall quality of vendor salesmanship (i.e. product knowledge, service, etc.)
Improving (64%), Declining (10%), Not changing (26%)

4. Purchases of components from overseas during the next five years will:
Increase (80%), Decrease (4%), Hold steady (16%)

5. How will these countries or regions rank (#1 highest) five years from now as foreign sources of components for U.S.-built cars?

Country	1st choice	Wgted for all	Rank
Japan	47%	21.3%	1
Mexico	16%	17.7%	2
Canada	26%	17.1%	3
W. Germany	3%	12.3%	4
S. Korea	3%	11.2%	5
S. America	3%	8.1%	6
France	1%	6.4%	7
Great Britain	0%	5.8%	8

6. Are you more likely than you were a few years ago to look beyond your company's in-

and-cost pressures—unlikely to ebb with the April 1 lifting of Japanese car-import quotas—obviously has encouraged a tighter, more closely woven relationship.

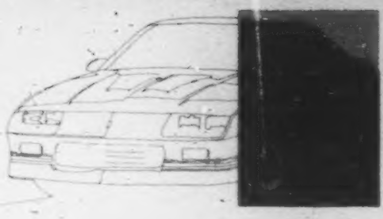
On the plus side, auto company buyers say their firms are offering vendor training programs (75%), making on-site inspections of supplier plants (97%), doing more single sourcing (91%), divulging product plans to vendors earlier (91%), and granting more long-term contracts (89%).

But company purchasing executives also have their own wish list in dealing with suppliers.

Some 31% would like more engineering technical support from their vendors, 28% want supplier help in the area of electronics and 16% would entertain input on plastics, 14% on other lightweight materials and 8% on engine components.

PMs doing o.k.

Life in the purchasing trenches these days seems to be a heady brew of the old and the new, but most folks seem to be having a reasonably good time.



Nearly 90% of respondents say they'd recommend purchasing as a career and 84% consider effective company policies in areas such as restricting acceptance of entertainment and other perks.

Then too, the rule book apparently remains a living document. A tidy 78% say they occasionally must bend company rules on purchasing procedures, and 15% say rule-bending is a routine fact of life.

Of course, everyone has a harder time dealing with some people than others. *WAW* asked purchasers which organizations within their own company make life most difficult. Not surprisingly, engineers emerge as the hands-down rating winner with 45% of the votes. The manufacturing side follows at 20%, with finance trailing at 16%.

And despite a gaggle of speeches by top auto industry executives, the people in purchasing seem unsure whether top management is listening when they make suggestions.

"Sometimes they listen"

Asked whether their ideas for substantive change in purchasing procedures get serious attention by higher levels of management, the people polled return a lukewarm 57% "sometimes," compared to 38 percent "always" and 5% "never."

The good news seems obvious: Automakers are taking the purchasing arms of the business more seriously. The best and the brightest in the calling believe they're getting an earlier and more effective voice in decision making.

Consider:

- 86% of respondents say they have more input in their products than before.
- 87% say that they are getting more support from higher levels of management.
- 95% believe they will be rewarded for increased knowledge in areas such as just-in-time, SPC, and other aspects of component strategy.

PW

WAW Editorial Assistant Karey McCann assisted with this story. ***PurchasingWorld provided assistance with the survey questionnaire.***

house operations and consider independent suppliers as sources of materials and components? Yes (75%), No (10%), No change (15%)

7. **Is just-in-time a practical way to operate a U.S. auto plant?** Yes (79%), No (21%)

8. **Does foreign sourcing conflict with your company's implementation of just-in-time?** Yes (47%), No (53%)

9. **In which areas do you see a greater need for products or services from independent suppliers than they now provide?** Engineering technical support (31%) Electronics (28%)
Plastics (16%) Other lightweight materials (14%) Engine components (8%) Other (3%)

10. **As your relations with suppliers become closer, you are:**
Offering vendor training programs: Yes (75%) No (25%)
Making on-site inspections of supplier plants: Yes (97%) No (3%)
Doing more single sourcing: Yes (91%) No (9%)
Divulging product plans to vendors earlier: Yes (87%) No (13%)
Granting more long-term contracts: Yes (89%) No (11%)

11. **On balance, from a purchasing perspective, are long-term contracts beneficial?** Yes (92%) No (8%)
How about single sourcing, is it beneficial all things considered? Yes (87%) No (13%)

12. **Purchasers have historically been charged with buying what engineers and others order at the lowest price. How is that changing?**
More purchasing input in total product Yes (86%) No (14%)
More support from management Yes (87%) No (13%)
Increasing knowledge required about overall component strategy (e.g. SPC, JIT etc.) Yes (95%) No (5%)

13. **If you proposed substantive changes in the way your company buys what it needs, would you get management's attention?** Always (38%), Never (5%), Sometimes (57%)

14. **Are you comfortable with policies and procedures you work under?** Yes (70%) No (30%)

15. **Does your company prohibit employees from accepting entertainment and other perks from suppliers?** Yes (72%) No (28%)
If so, is the policy working? Yes (84%) No (16%)

16. **Knowing the changes taking place in purchasing, would you recommend it as a career?** Yes (89%) No (11%)

17. **Which part of your company gives you the most headaches?** Engineering (45%), Manufacturing (20%), Finance (16%), Other (12%), Marketing (7%)

Footnote: For questions 1 and 6, the following process was followed: Respondents were asked to rank from 1 to 8 their choices. The first column, "1st choice" lists the percentage of respondents that gave it the top priority. The second column, "weighted for all," weights the responses with 8 points for a No. 1 to one point for a No. 8. By adding up the points for each response category and dividing by the total number of points, a percentage of the whole was calculated. The third column, "rank" reflects the ranks based on the figures in column 2.

PMs see price discounting continuing

The nation may be in its third straight year of uptrend, but you would never know it from some of the price deals available these days.

Just how soft tags are is indicated by a new *Purchasing World* survey of price discounting which suggests that industrial quotes in many cases are little more than starting points for serious negotiations.

And the overwhelming majority of PMs surveyed expect things to remain this way. Nearly three out of four see the current buyers' market holding for at least another 12 months.

Some of the more specific findings of the just-completed *PW* price survey:

- **Current shading:** An impressive 72% of the respondents say they are getting "buys" on at least some of their purchase mix. And 50% note that about half the items they purchase are available at off-list levels.
- **Now vs a year ago:** There has been a slight tendency toward reduced discounts. But the accent should be on the word "slight" because counterbalancing the 43%' who note somewhat fewer bargains are the 42% who have experienced no change and the 15% who say they are actually doing better than they were a year ago.
- **Weakest areas:** Product lines subject to considerable shading are said to include most carbon steel shapes (sheet, plate, bar and tubing, etc.), stainless steel, alloy steel, castings, forgings, bearings, aluminum, tooling, plastic resins, solvents, plasticizers, petrochemicals, semiconductors, fasteners, motors, magnet wire, grey goods, lumber, abrasives, petroleum-based products, and some MRO items.
- **Reasons for the shading:** Foreign competition is the key factor noted—with 54% of the respondents naming imports a prime cause for the softness. Other factors noted prominently include excess supplies, less-than-expected demand, hard-nosed bargaining, lack of cost justification.
- **Type of concession:** No single ploy dominates, but the key ones are (with the percentage of PMs citing each as a major factor): extended price guarantees (58%), cash discounts (38%), better terms of sale (38%), freight absorption (27%), throwing in of extras (19%), and improved level of services (15%).
- **The net impact:** The average discount off lists varies with the type of purchase mix. Firms heavily involved in steel and other basic raw materials are doing best, often getting 10% or more under list. Also worth noting is that more than two out of five respondents report discounts averaging in the 5-8% range and nearly three out of four getting at least 5% off.

Factors holding the line

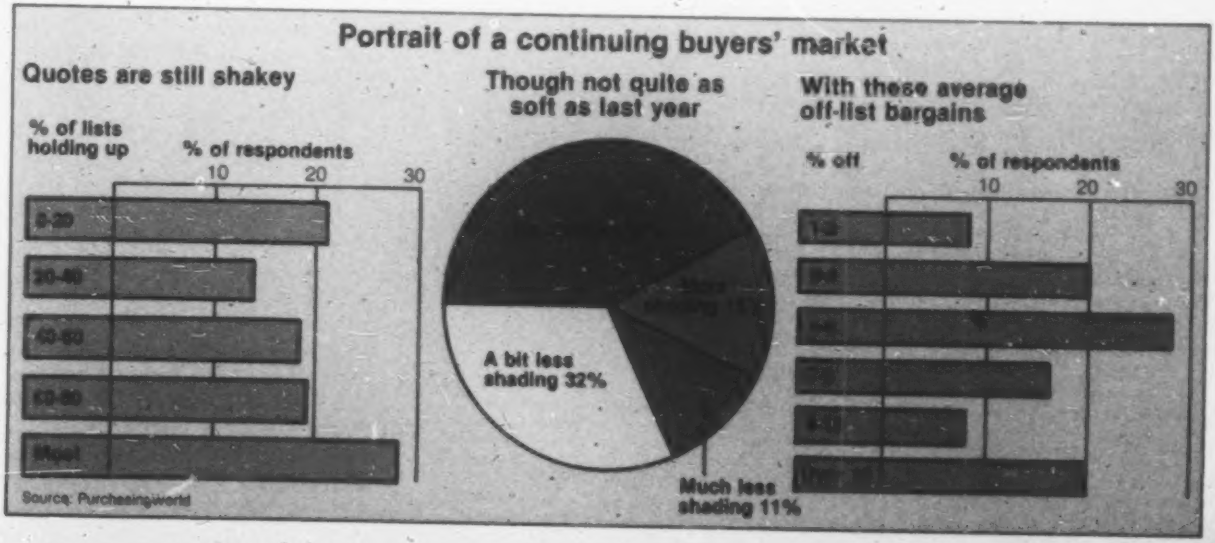
The reasons for expectations for continued easy market are basically the same as the ones that are behind current discounting—market imbalances, continued heavy imports, and hard-nosed bargaining sparked by the inability of PMs' own firms to raise prices.

Observes one Ohio-based purchasing executive, "I see nothing on the horizon to change the current trend; supplies remain more than ample, competition is keen, and a strong dollar is helping to keep import prices down."

One PM, however, is a little leery—doubting that the import factor will remain as strong as it has been. He feels that new trade curbs (such as those on steel and textiles), plus a possible decline in the value of the dollar, could combine to make bargains a bit harder to come by as the year draws to a close.

But whether this happens or not, most purchasing executives seem determined to hold the price line. Aside from continuing to search out import buys, many say they are now offering vendors the carrot of bigger, longer-term orders in return for price concessions or at least longer periods of guaranteed price levels.

Aggressive negotiation isn't about to be abandoned either. ***PW***



Portrait of a continuing buyers' market

Source: PurchasingWorld

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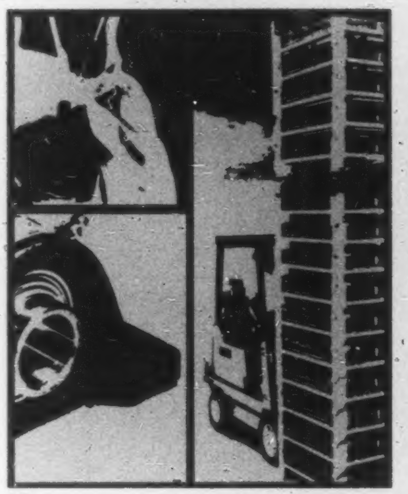
Helping you manage the business of buying
Vol. 29 No. 5-May 1985

Special report: MRO BUYING

62 Overview: MRO demand steady; prices mostly holding
Geographic differences on the domestic price and demand fronts make shopping around for MRO items a smart strategy. Industrial distributors see a 5% overall sales gain for 1985—far below last year's 17.5% gain.

66 Industrial distributors put new value into their services
National marketing agreements are only one aspect of how distributors and manufacturers are working to meet their customers' MRO buying needs. Such agreements allow the MRO manufacturer to concentrate on solving customer problems. The buyer gets prompt attention to his problems.



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Features

46 *Cover story:* **Women make their mark in purchasing**
Many personal interviews and a survey of *PurchasingWorld's* female readers reveal that women in purchasing generally love their jobs and are working hard to move into positions of greater responsibility.

78 Playing the exchange rate game the easy way
The Global Exposure Monitor (GEM), a software package designed by Wharton Econometrics, can help you anticipate the effects of fluctuating values of foreign currency.

94* New software puts power in purchasing
The designers of a new line of purchasing software call the programs "a purchasing expert in a box." The programs organize day-to-day purchasing activities and provide buyers with special analytical and decision support capabilities.

100* Tips for management: Improving purchased material quality
Westinghouse's Productivity and Quality Center has developed a structured approach to develop and monitor quality of purchased materials.

Cover Photo: Featured are 11 women from Polaroid Corp.'s purchasing department, in Waltham, MA. Please turn to page 56 to learn who they are. Photo courtesy of Polaroid Corp.

Enter PW's Crystal Ball Contest

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PW PREDICTS

Robert S. Reichard, executive editor

Prices mostly becalmed

Inflationary pressures remain subdued. And major price indexes in the current (second) quarter are likely to show only fractional increases.

For many industrial buyers, tags may actually be edging a bit lower. For the fourth consecutive month, the NAPM Business Survey Committee reports that buyers hit with price decreases now outnumber those experiencing increases.

Vendors also suggest continued restraint. A new Dun & Bradstreet survey of 1,450 top executives, for example, shows only 39% of queried durable goods manufacturers putting second quarter prices above year-ago levels. That compares to a 53% reading last spring.

The moderating trend is also confirmed by a new McGraw-Hill survey which shows that U.S. industry anticipates only a 4.9% overall price increase for 1985—a downgrading of the 5.3% estimate made just four months ago.

Other signs that things remain pretty much under control:

- Service industry inflation is finally edging lower. At latest report, quotes here were increasing at only a 3.5% annual rate—down from the 5.3% pace of last quarter.
- Food price pressures are minimal. Right now the average farm price is running nearly 8% under a year ago. And even if you factor in rising distributor costs, supermarket prices probably won't rise by more than 2-4% this year.
- Labor continues to behave. Year-to-date labor cost figures should rise only 2.5% this year—virtually ruling out any new cost-push pressures on the overall price level.
- The U.S. dollar, although off from recent peaks, the dollar is still high enough to insure a steady inflow of low-priced imports.

In any case, because of lags, it would take at least six months before a lower dollar had any appreciable impact. And even then, price advances would be modest—primarily because importers did not mark down prices as much as they could have during the dollar's recent runup.

Wharton Econometrics also provides some reassurance on import prices. The firm has developed a "what-if" scenario which assumes a 20% drop in the value of the dollar over the next few months. Their conclusion: only a 2% acceleration in overall U.S. industrial commodity prices for 1986.

Purchasing World's own survey on imports (see *Survey of the month* in this issue) shows that buyers are now getting price breaks that average 15% below comparable domestic levels. Bargains of this magnitude make domestic vendors more prone to discounting and other forms of price shading. And domestic sellers who are not discounting are thinking very carefully before posting increases.

Given all this good news, price averages for 1985 should remain very manageable. If the economy continues to grow at its current sluggish pace, the overall price increase for 1985 (GNP basis) should remain in the 4% range.

Long term energy price trends

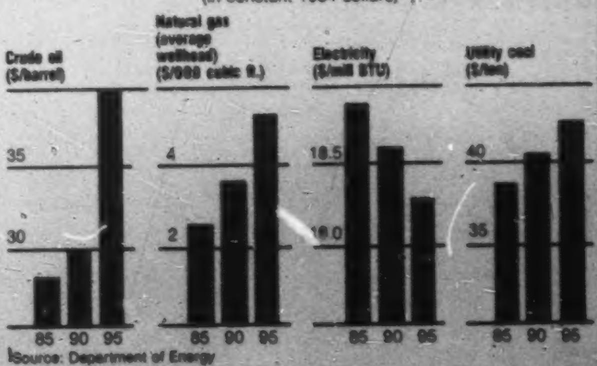
Good news on the energy front, particularly for electric bills: Over the next five years real prices for energy (in 1984 dollars) may decline. A new Department of Energy long-range forecast projects that electric rates will decline from the current $18.82/million BTU this year to $18.62 in 1990 and to $18.30 by 1995.

But prices for other forms of energy should continue to edge up, albeit modestly. Crude oil is expected to reach $30/bbl by 1990 (vs $28/bbl currently), wellhead prices for natural gas are projected at $3.52/thousand cubic feet (vs $2.67 currently), and 1990 utility coal prices are put at $40.42/ton (vs $38.54/ton currently).

Much of the moderation lies with the expectation of only small increases in energy use which is pegged at 10.5% overall in the next five years—a gain of 2% annually. This is only about two-thirds as fast as the anticipated GNP growth, which means that the energy dollar portion of GNP will decline about 1% per year.

The relative contribution of individual energy sources is expected to remain unchanged through 1990 with oil supplying 52% of the nation's power requirements, followed by natural gas (26%), electricity (15%), and coal (6%).

About the only long-term change is noted in natural gas consumption where the estimated 1990 share (26%) represents a substantial decline from the 1970 mark of 32%.



Energy prices: A long look ahead

(in constant 1984 dollars)

Source: Department of Energy

PW PREDICTS

Zinc

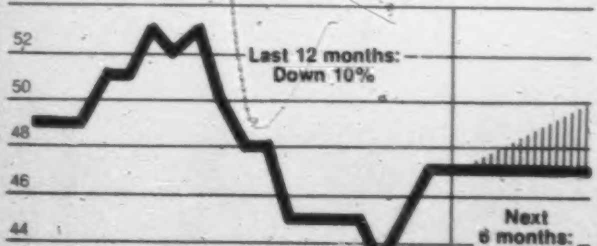
CURRENT SITUATION: Zinc is experiencing a definite upswing. Tags are now in the upper 40¢/lb range. Die casting alloys are moving up. And the European price has jumped another $35/m.t. (to $960). Other signs of strength: (1) brisk demand, (2) the absence of uncommitted metal, (3) the recent closing of a big U.S. plant, and (4) low stocks. Free World stocks have been declining. **Fears of new strikes must also be considered—a long strike could make things really tight.**

DEMAND: Sparked by strong auto and construction markets, U.S. consumption could rise another 1-2% this year. Galvanizing use will be up as the auto industry strives to make cars more rust-resistant. Die casting demand should also fare well as the per-car decline of the past five years bottoms out. Global use will also be buttressed this year by purchases from Europe, Russia, and China. **Long-term usage, however, won't be all that earthshaking**—the annual domestic growth rate is put at only 2% through 1990.

SUPPLY: Current snugness is expected to continue into summer—especially if work stoppages occur. Global stocks are off 5-10% from last year. Available stocks come to less than a 6-week supply. On a more reassuring note—there seems to be ample global capacity. **By year-end the metal should be in balance. The U.S., however, will be increasingly dependent on overseas metal.**

PRICE OUTLOOK: Some modest upcreep can't be ruled out—given the precarious market balance. Assuming there are no major strikes, prices may approach 50¢/lb by summer or fall. No big runup is expected in the long run either. In fact, increasing production and levelling off in auto and construction demand could well lead to **some softening again by early 1986.**

Zinc (producer price)
(¢/lb.)



Steel

Markets are showing some signs of firming as imports diminish (from 27% of total use last year to an estimated 22% this year). Several producers have posted 5% boosts in structurals and are starting to negotiate higher quotes on flat-rolled products. Oil country tubular goods from Japan may soon be rising by about 5-7%. And tool steel seems to be having its troubles—with competition washing out increases in both plate and bar products.

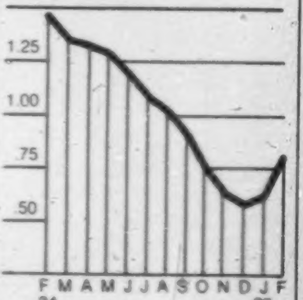
Paper

Most lines remain soft. Linerboard is now going for $290-310/ton—off as much as $60/ton from most official producer lists. The easiness can also be found in corrugated boxes where quotes have also begun to slide. Market pulp is also weak, with discounts of $100/ton reported for bleached softwood and hardwood lists. Publishers seem to be resisting attempts to post a new 6.5% increase for newsprint. But the recent $40/ton increase in coated papers seems to be holding up quite well.

Semiconductors

Prices are weakening further. Sharpest declines have been in Dynamic RAMS where 64Ks now go for only $1. Quotes on the more powerful 256K are down to near $5 ($3-6 under levels of just a few months ago). Behind the slide: increased capacity and less-than-anticipated demand. On the latter score, U.S. sales might be able to eke out only a 5-10% gain this year—far under the 35% plus increase of 1984. Another sign of softness: The Japanese seem to be abandoning their 2-tier system whereby U.S. quotes were 20% under those prevailing in Japan.

Semiconductors
(Book-to-bill ratio)



Source: Semiconductor Industry Assoc.

Copper

Prices are firming—edging up into the 70¢/lb range. All signs point toward a 75-80¢/lb quote by early summer. Declining inventories, aided by U.S. production cutbacks, would seem to be signaling this increase. Hedge market stocks, for example, are down to almost half year-ago levels and global inventories are down to a normal 9-week supply. The increase in capital goods, which account for more than half of overall use, is also helping the demand situation. Demand will also be boosted by 500,000 mt of Chinese

PW PREDICTS

Aluminum

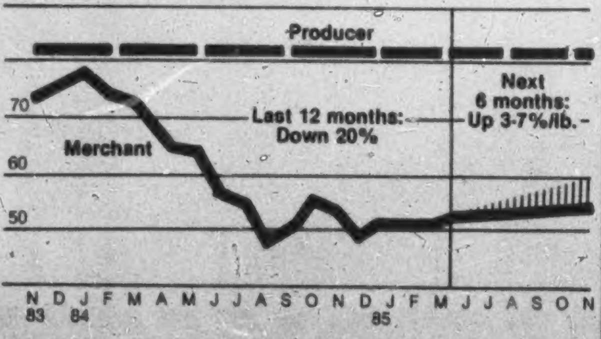
CURRENT SITUATION: Prices continue to bump along at bargain basement levels. Metal ingot is still selling in the low 50¢/lb range—way down from last year, and the picture is much the same in highly fabricated sectors. Buyers report: (1) Common alloy ingot is available for only $1/lb, (2) Imported billets can be had for under 60¢/lb, and (3) Japanese stock is priced 5% under domestic levels. Imports are a major factor behind the current softness. **Another drag: continuing high inventories despite substantial production cutbacks.**

DEMAND: All signs point to continuing gains in 1985. It's a safe bet that domestic shipments will advance another 4% this year—enough to push totals up to the 16 billion lb range. And **Free World usage is expected to show an big 3.5% advance.** In the domestic market, packaging should do well, as will transportation where high auto usage and recovery in commercial aircraft construction should push demand upward. **Long-term U.S. demand will also climb**—3.5% annual advances are seen for the next few years.

SUPPLY: It looks like clear sailing everywhere. Global inventories are put at near 4.4 million metric tons. And U.S. producer holdings haven't fallen much over last year, despite production cutbacks. Also suggesting a continuing buyers' market: (1) low U.S. operating rates (nearing 70%), (2) excessive overseas supplies, (3) hand-to-mouth buying on the part of most metal users.

PRICE OUTLOOK: Continuing production cutbacks will eventually have some impact. So will cost pressures. On the latter score, estimates are that some U.S. producers are losing as much as 10¢/lb on every pound of ingot they sell. **But increases, when they come, will be modest. While some industry spokesmen are projecting a 65¢/lb ingot price by year-end, a 60¢/lb price seems more likely.**

Aluminum (ingot prices)
(¢/lb.)



purchases expected this year, and by predictions that 1985 Free World demand will be up 4-5%. All these factors suggest the current rally still has a way to go.

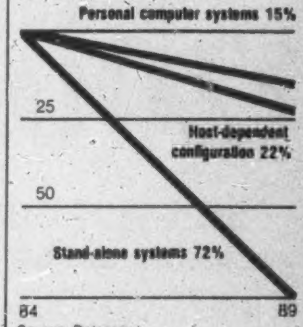
Construction equipment

The so-called grey market has spilled over into the industrial sector—with foreign-market hydraulic excavators, bulldozers, and backhoes all available at well under official list. And the discounts are considerable—sometimes ranging as high as 50% on some big-ticket items. The majority of sales are on the East and West Coasts—but there are also reports of Midwest sales via Canada. Apparently the money saved outweighs such headaches as "up front" payments, lack of warranties, and concerns about safety. There's a lot of fallout in domestic markets too—prices have remained relatively stable over the past year or two.

CAD/CAM

New systems (including hardware and software) are available for as little as $20,000-$35,000—far under the near $100,000 quotes of just one year ago. The aim is to make these systems affordable to smaller job shops—a goal that has been aided by cheaper personal computers. A new study by Dataquest suggests CAD/CAM system sales will jump five-fold over the next few years—rising from $3 billion in 1984 to over $15 billion by 1989. The actual number of systems sold over the next five years will increase even faster as workstation hardware prices drop sharply (see accompanying chart).

CAD/CAM price trends
(% decline in workstation hardware prices 1989/1984)



Source: Dataquest

Modems

The price of standalone modems are dropping fast. Credit the softness to lower component costs, manufacturing efficiencies, and the sharp drop-off in demand for PC peripherals. Some vendors have dropped tags on 1,200 and 2,400 bits-per-second models by anywhere from 13-22%. Higher-end models have also been feeling the pressure, with one 9,600 bps model cut by more than 15%.

Sulphur

Look for new attempts to boost prices by summer or fall—despite the failure of a recent $5/long ton hike to hold. While some producers refused to go along (saying that three boosts in one year were too

PW PREDICTS

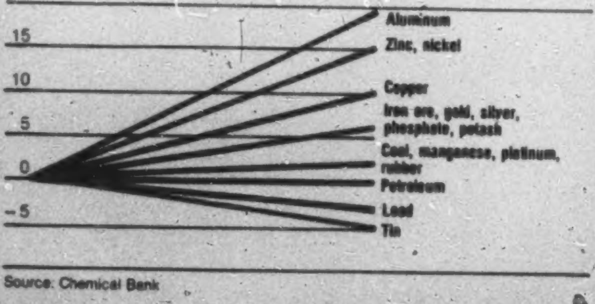
World commodity prices

Most basic commodity prices are not expected to rise much this year. Several may even end up under late 1984 levels.

That's the conclusion of a new worldwide study by economists at New York's Chemical Bank (see chart). Key conclusions of the study for the 12-month period ending 1985:

- **Energy:** Quotes will remain under pressure, with the prospect of an additional cut in official contract oil prices. Coal prices are likely to stabilize around current levels as producers show greater interest in maintaining output than pressing for higher prices.
- **Steel-related items:** Manganese prices have already come off the bottom and indications are that iron producers will be able to squeeze a price rise out of current negotiations after the sharp fall of previous years. Buoyancy in stainless steel should help nickel prices: A price increase of 15% is likely this year.
- **Other base metals:** Zinc, copper, and aluminum all appear likely to show substantial price increases, ranging from 10% in copper, 15% in zinc, to 19% in aluminum prices. In all cases, limited demand increase will be more than compensated by production and a somewhat weaker dollar.
- **Precious metals:** Projections of modest price advances are predicated on a combination of declining dollar strength, continuing industrial demand, and some recovery in investment interest. But only palldium will retain the highs reached a few years ago.
- **Agriculture and fertilizers:** Relatively small demand increases in rubber will hold prices near current levels. Aggressive marketing by offshore producers should prevent upward price movement in phosphate rock. And potash is expected to rise only in line with inflation (about 5.5%).

Global material price changes
(Percent, 4Q '85 vs 4Q 84)



Source: Chemical Bank

much), the basic supply-demand fundamentals do seem to dictate more increases over the longer pull. One source puts last year's global shortfall in production-consumption at over four million metric tons—with the gaps filled by big inventory drawdowns. And an even bigger shortfall is seen for 1985. Don't be surprised if the FOB Tampa price rises to $157/long ton by early next year—$10 above current lists.

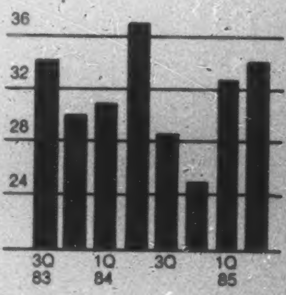
Lead

The heavy metal could begin to move higher by mid or late summer—when the new battery buying season gets underway. But any chance of a major rally (into the 25-30¢/lb range) seems remote—given (1) current high inventories, (2) the continuing phaseout of leaded gasoline, and (3) a worldwide capacity glut, with plenty of supplies available from both domestic and offshore operations. The long-term prognosis isn't all that bullish either. Overall consumption gains in the next few years are put at only 1% annually. Even that could be overly optimistic.

Polyvinyl chloride

Three consecutive 2¢/lb price increases have pushed the asking price for pipe grade PVC up into the 34¢/lb range. But it may take another month or so for this hit to take hold. Another sign of price caution: One big producer has announced it will hold the line on the 34¢/lb quote for the rest of the second quarter. Also likely to limit PVC price hikes over the long term are (1) low operating rates (estimated to average out at only 74% this year) and (2) lackluster demand—with shipments not expected to top last year's 6.8 billion pound level.

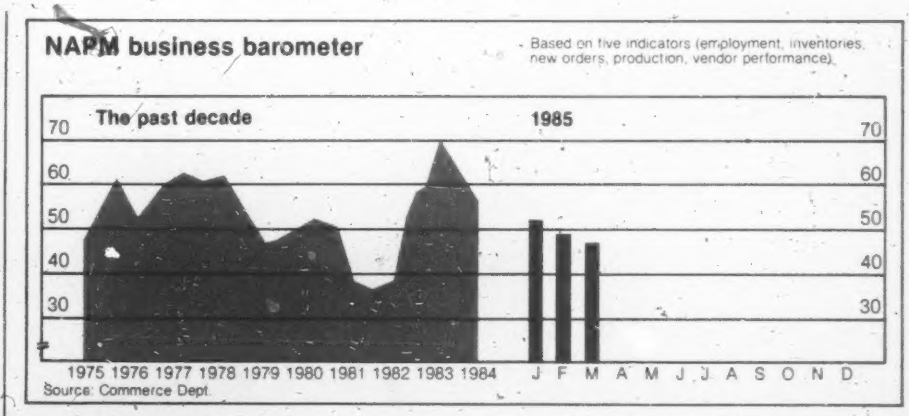
PVC price (pipe grade)
(Mkt. price ¢/lb.)



Styrene

The second 2¢/lb increase this year has brought quotes up into the 28¢/lb range. Blame much of the advance on rising benzene feedstock costs which have zoomed up more than 20¢/gallon so far this year (into the $1.40/gallon range). Another plus has been steady demand for downstream polystyrene which is expected to rise another 2% this year—on top of last year's 6%-plus advance. But some leveling off in styrene tags is anticipated after midyear—as the 1.2 billion pounds of additional global capacity, put on stream over the past year, gradually spills over into world markets.

BUSINESS DATATRAK



NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance).

Source: Commerce Dept.

KEY ECONOMIC TRENDS

Business still on the upswing

Discount talk of a shaky economy. Quite the contrary, all signs point to continuing gains. They are likely, though, to be spotty and generally a lot smaller than those recorded in the recent past.

One of the big problems, of course, is imports. They continue to come in at record levels, taking business away from many domestic companies. This trend is most apparent in the manufacturing sector where output has been virtually unchanged since late last fall.

On the other hand, there are still enough other positive indicators around to suggest a continuing business uptrend. These include:

- Still low inventory levels—the bellwether durable goods stock/sales ratio, a key indicator of PMs' days supply, remains in the 54-55 range, below levels prevailing as recently as October (see chart). Other things being equal, this suggests that any new gains in final consumption will be quickly translated into new orders.
- Relatively buoyant capital goods markets, sparked by gains in defense, plant and equipment orders, are now on a high plateau (see chart). Actual outlays could well rack up further gains. The latest plant and equipment spending survey indicates that 1985 dollar outlays could top last year by as much as 7%.

While this isn't quite as robust as last year's big 14.9% advance, it is still enough—even after allowing a few percentage points for inflation—to achieve some real gain.

- Consumer spending totals seem to be holding up quite well. During the first quarter, domestic automobile sales hit an 8.5 million annual rate.

And while this pace isn't likely to continue indefinitely—the outlook remains surprisingly bullish. Plans to buy a new car, as monitored by the Conference Board, actually moved higher in March (the latest available month). Specifically, 10% of the family units queried say they now plan to buy a new or used car.

Plans to buy new homes are also up. And the rest of the construction market is looking good. Construction awards this year are expected to advance about 5% this year—with housing awards up by an even larger 8%.

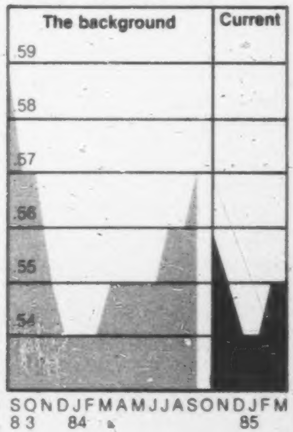
One reason for all the consumer confidence could be the current healthy employment picture. Help wanted figures, for example, are still very high (see chart). Ditto, factory hours and hourly earnings, with the latter up 3.3% over the last 12 months.

Another reassuring sign—at least as far as the overall economy is concerned—is the attitude of the nation's money managers. The Fed is now making it clear that it will keep credit flowing.

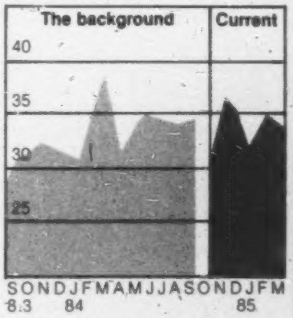
If nothing else, this sug-

Leading indicators

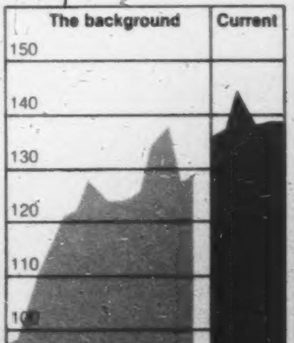
1. Inventory/Sales Ratio
(Durable Purchased Materials)



2. Capital Goods Orders
(Billion of dollars)



3. Help Wanted Index
(Index: 1967 = 100)



gests that interest rates will hold close to current levels—low enough to assure continued gains in areas as construction and big ticket consumer durables.

Given all of the above, it's easy to see why business executives remain optimistic. Lest there be any doubt, take a look at Dun & Bradstreet's new poll of top manufacturing executives which shows that some 76% expect second quarter sales to top year-earlier levels—far surpassing the 19% who see no change and 5% who are projecting declines.

In short, there still seems enough momentum to keep the economy in the plus column for at least another one or two quarters. On the other hand, it must be recognized that GNP gains are likely to be quite small—probably on the order of 2-3% at annual rate.

PM pay hasn't been faring all that well

Purchasing executives are in danger of falling behind in the salary sweepstakes, according to the Administrative Management Society (AMS).

A new AMS survey shows that average annual pay has increased only 3.4% over the 12-month period ending last fall. That's only about half the 7.7% increase noted for the combination of 20 U.S. middle-management positions.

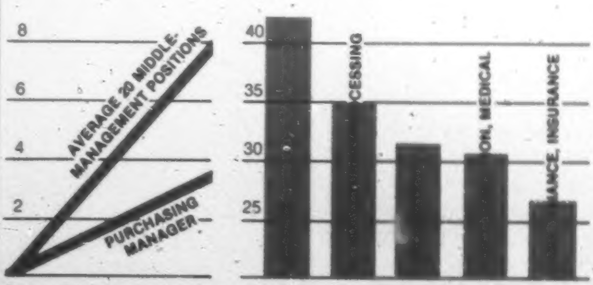
The overall dollar figure for the average PM ($33,000) isn't very impressive, either, especially when compared to the annual earnings of such other professionals as plant managers ($42,100), sales managers ($40,000), personnel directors ($38,400), and auditing managers ($37,400). On the other hand, it's well above warehouse managers who are currently getting only $27,600 per year.

A significant amount of variation is also noted within the purchasing profession. Those working for utilities tend to fare best—earning about $42,200 at last report. Manufacturing/processing PMs are somewhere in the middle (earning $35,000) while banking and financial types are at the bottom of the ladder, pulling down only about $27,000 per year on average.

On the other hand, there was not too much variation regionally, though buyers in the East and East Central states tended to fare slightly better than their counterparts in other areas of the country.

Another finding, pertaining to all 20 middle management positions: over half of the surveyed companies continue to pay the full costs of such insurance benefits as group life, hospital, surgical, major medical, accidental death, dismemberment, and long-term disability. Also 63% of the firms pay the full cost of their exempt employees pension plans.

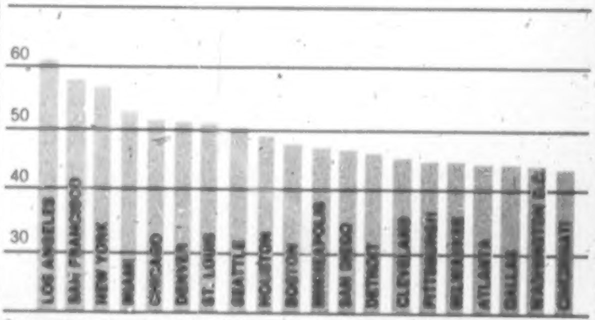
What purchasing managers are paid



Source: Administrative Management Society

Car driving costs

(¢/mile, a city-by-city breakdown)



Source: Hertz: Assumes a new 1984 compact driven 10,000 miles per year and held for five years.

Skip averages when budgeting for your fleet

Don't rely on national averages when budgeting for fleet car driving costs.

Los Angeles locations, for example, will probably have to shell out 36% more than locations, say in Cincinnati.

The exact driving and maintenance costs—based on a new Hertz survey for new compacts driven 10,000 miles per year and held for five years—are detailed in the chart. They suggest that the five costliest cities in terms of cents per mile are Los Angeles (60.7), San Francisco (58.2), New York (57.3), Miami (53.5), and Chicago (52.7).

The actual figures may be even larger because the numbers exclude parking and tolls—items which can add anywhere from 5-30¢/mile to the overall bill.

Outlays last year increased an average of 6.6% for the 20 cities surveyed. City-by-city increases also showed wide variation in this 6.6% average. In Houston, for example, costs rose 11.8%, in sharp contrast to Milwaukee where only a 2.7% advance was noted.

The survey also found that depreciation accounts for some 29% of the average annual cost of the typical fleet car, followed by insurance, leasing, and fees (28%). Gasoline and other service station charges account for about 15% of total outlays.

CURRENT PRICES

Key inflation yardstick marks time

Industrial prices are following the same pattern since early last year. The overall gain in this bellwether inflation yardstick is only 0.2% over the last 12 months.

Even this is somewhat of a distortion since roughly half of the product lines regularly monitored by *PW* are currently under last year's levels (see table for details).

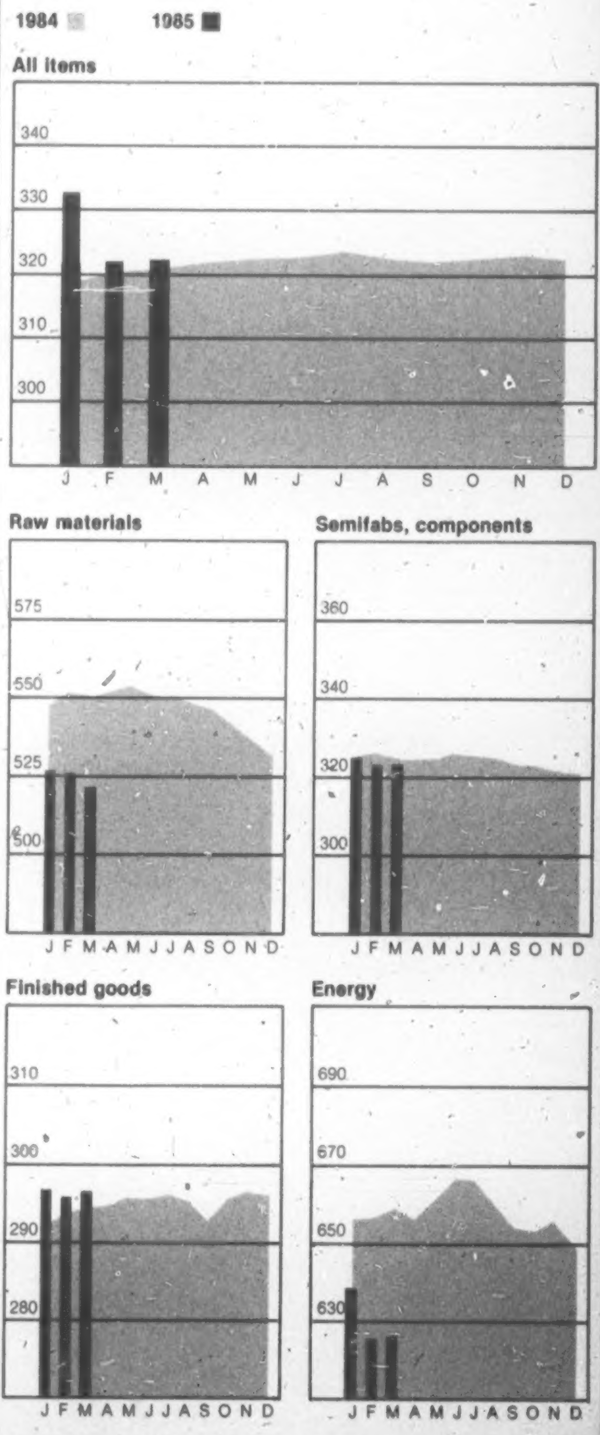
Current prices vs. month-ago figures indicate this trend is continuing. New easiness, for example, is noted in textiles (both synthetic fibers and grey fabrics), in plastics (off 0.4% for the month), and in selected energy areas (namely crude oil, coke, coal, diesel fuel, and

This month's breakdown

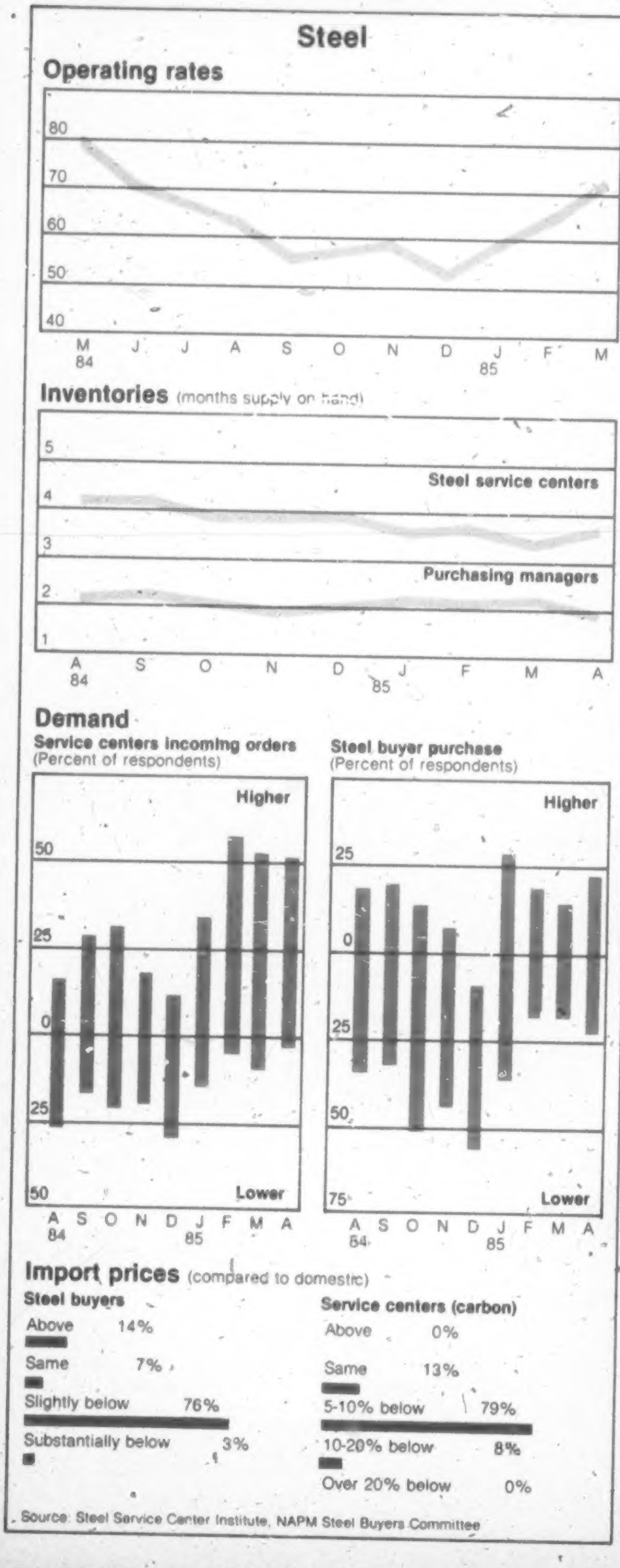
	Latest level (Mar.)	% change from: Month ago	Year ago
Bearings	347.3	0.4	3.0
Bolts, nuts, etc	277.3	−0.6	1.8
Chemicals, inorganic	301.6	0.2	4.0
Chemicals, organic	351.7	0.0	−5.2
Concrete products	315.0	0.2	2.8
Corrugated cartons	284.2	−0.1	9.3
Cutting tools, small	285.7	0.0	2.1
Electric lamps (bulbs)	340.6	−0.6	−0.3
Electronic components	198.6	0.0	4.4
Fans and blowers	357.3	0.0	4.5
Foundry and forge products	364.1	0.2	1.5
Fuel oil (residual)	1112.6	0.5	−0.1
Furniture, commercial	303.5	0.4	3.0
Gasoline	516.6	1.7	−9.0
Glass, flat	221.2	0.1	−3.4
Glass containers	370.7	1.8	5.4
Gypsum products	320.9	−2.8	−5.5
Hand tools	371.5	−0.1	4.4
Hand tools, power driven	232.9	0.0	4.6
Industrial furnaces	383.6	0.3	3.5
Integrating and measuring instruments	230.4	−0.4	1.5
Internal combustion engines	346.6	0.0	2.9
Lubricating oil	769.6	−9.4	−3.5
Lumber millwork	309.5	−0.5	0.0
Material handling equipment	294.0	0.4	2.3
Metal containers	357.5	−0.2	3.5
Metal mill shapes (nonferrous)	311.9	−1.0	−4.2
Metal tanks	305.7	0.0	0.1
Motors and generators	350.1	0.5	3.6
Motor trucks	296.2	0.0	5.3
Office and store equipment	153.8	0.1	−0.3
Paperboard	285.7	−0.7	3.7
Paper boxes and shipping containers	276.7	0.0	7.0
Paper office supplies	240.0	−1.4	2.7
Paint	279.7	0.3	4.6
Plastic resins	305.5	−0.4	−0.2
Precision measuring tools	261.6	2.2	3.3
Pumps and compressors	355.8	0.8	2.3
Refractories	368.0	0.3	1.9
Rubber belts and belting	354.5	−0.5	2.7
Scales and balances	229.7	−0.2	−0.4
Steel products	364.3	0.0	1.1
Switchgear	277.5	0.5	0.8
Textiles, synthetic fibers	156.6	−0.7	−2.6
Textiles, gray fabrics	152.5	−0.4	−0.5
Tires and tubes	241.2	0.2	−0.2
Transformers and power regulators	234.4	0.6	3.8
Welding equipment	286.3	−0.1	1.2
Wire and cable	203.2	−0.5	0.0

Industrial prices

(Index: 1967 = 100)



Source: Bureau of Labor Statistics



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

natural gas).

Construction materials also fell for the second month in a row—sparked by softness in plastic construction products, nonferrous wire and cable, gypsum, plywood, and millwork.

Even previously uptrending product lines seem to be taking their lumps. Paper products, after some strong advances in 1984 are beginning to weaken, with declines over the last 30 days noted in paperboard, corrugated cartons, and paper office supplies.

Organic chemicals haven't been buoyant either, with little change in prices over the last month keeping averages more than 5% under year-ago levels.

Some areas, however, are not that soft. Capital equipment, for example, is a little firmer as a result of recent boosts in metalcutting machine tools, industrial ovens, material handling equipment, pumps and compressors, and electrical equipment. But even with these increases, the overall equipment average is up only about 1% so far this year.

STEEL SCENE

Demand looking a bit more bullish

The nation's steel distributors see the steel demand picture brightening these days.

The latest Steel Service Center Institute's (SSCI) survey showed more than 50% of respondents looking for an increase in incoming orders over the next three months in contrast to only 3% looking for declines.

This is the fourth straight month that centers expecting increases outnumbered those expecting declines. Moreover, shipping totals seem to be confirming this brighter outlook with year-to-date tonnage running a substantial 4% above comparable 1984 levels.

Some of the gain can probably be traced to the increasing share of overall steel business being captured by distributors as buyers emphasize just-in-time deliveries. This trend is especially evident in plate where service centers now have nearly 30% of the market vs. only 20% a few years ago.

Steel buyers (purchasing from both service centers and the mills), though, are still playing their steel cards close to the vest. For the third straight month, for example, results of an NAPM survey suggest that the number expecting to increase their receipts of steel are pretty much balanced out by an equal number who anticipate retrenchment.

This more cautious attitude could, in part, be due to the import competition faced by the PMs' own firms. And in a sense this conservative view is also being voiced by mills. The fair-sized shipment increases they see ahead won't be because of increased consumption but rather because domestic material will be replacing imported steel.

Not too much change is seen in overall steel inventories either. This is certainly true in the service center sector where stocks, after falling last year, have held at just under six million tons for four consecutive months.

That's the equivalent of only a 3.6 month supply, down substantially from the four-month reading of early last fall.

While no major changes in inventories are seen, there could be some dramatic shifts in sourcing. A growing number of respondents now say they expect to be less dependent on overseas metal by late 1985. Quotas are expected to drop import share of market from 27% captured last year to only 23% this year.

Equally significant, both buyers and service centers say foreign mills are becoming less active in seeking new U.S. business.

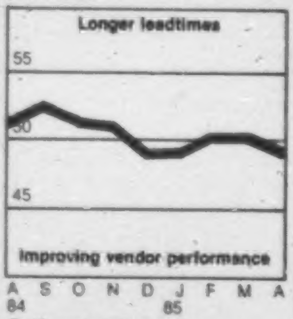
So far, however, these same respondents have not noted any big change in the domestic import price gap. The latest SSCI survey, for example, finds 87% of the respondents buying foreign carbon steel under U.S. levels—with 8% putting the advantage in the 11-20% range. Zero in on stainless and everybody seems to be experiencing a price advantage, with a hefty 40% putting the gap in the 11-20% range.

Buyers tell much the same story—with 79% getting price breaks. Though now only 3% dub the advantage as "substantial."

Monthly procurement status report

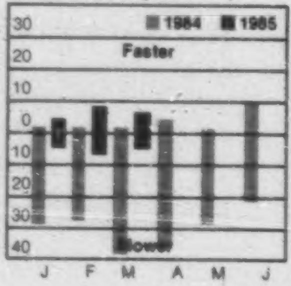
Leadtime index

A "diffusion" index based on 158 key commodities. Avove "50" indicates a tendency for leadtimes to stretch out. Below "50" suggests improving vendor performance.

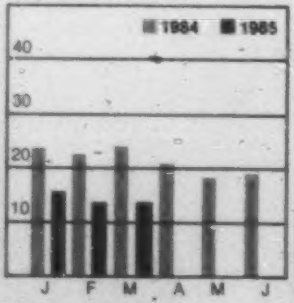


Delivery performance

(Percent reporting deliveries)

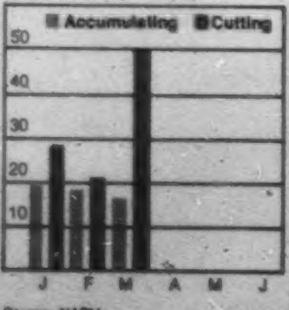


Forward commitments



Inventory strategy

(Percent of respondents)



Source: NAPM

PROCUREMENT STATUS

Chalk up another problem-free month

Purchasing managers responding to *PW*'s latest monthly procurement survey suggest that imports might be playing a major role in keeping things in balance.

For one thing, imports add to the overall supply base while at the same time keeping domestic operating rates well under critical levels. Another factor could be pressure from PMs themselves. With just-in-time inventory strategies limiting the margin of error, buyers just can't afford to tolerate delivery slippages.

Also, average leads seem to be falling again after a brief leveling off during early 1985. *PW*'s exclusive leadtime index dropped to 49 at latest report—indicating that more delivery times fell than rose over the latest 30-day period.

Not all leads can continue to be cut simply because many are as low as they can go. Buyers, though, seem determined to find new areas for improvement.

Capital equipment is a case in point. A new study by Townsend-Greenspan, for example, finds that the typical equipment wait is now down to 150 days, off some 6% from last fall's levels.

There is also plenty of evidence that things are pretty easy these days. Only 5% of NAPM Business Survey members now report slower deliveries—matching the performance of late 1984 when the economy was taking a temporary breather.

Further confirming the "problem-free" purchasing environment is the fact that only 14% of queried buyers are now committing 90 days or more in advance for production materials. That's in sharp contrast to just a year ago when the figure was up in the 20%-plus range.

Perhaps the most reassuring sign of all is that for two consecutive months now, not one item has appeared on the NAPM short-supply list.

Leadtimes and availability

Chicago: Steel coils have come in a bit to 4-10 weeks. Ditto softwood framing (to 1-2), bichromate sodium (to 3-5), and special brass tube (to 4-5). Edging out are brass and copper sheet and coil from stock (1-2), stock brass and copper (1-2), and special brass and copper rod (4-5).

Cleveland: Slightly reduced 3-4 week waits are noted for polyethylene and PVC resins. Coil coating paint is out (to 5). Other leadtimes in weeks: corrugated containers (3), folding boxes (4), cold finished aluminum (10-12), steel reconditioned drums (1-2), and most alloying materials (on demand).

Los Angeles: On the upside (in weeks): grey iron castings (6-7), brass castings (6-8), linear ICs (30), and standard valves (10-12). Coming in are carbon steel bar and coil (2), standard bearings (18-22), aluminum products (2), and metal film resistors (8-12).

BUSINESS DATATRAK

Houston: No big changes here. Softer prices suggest somewhat reduced leads ahead. Typical leadtimes: High density polyethylene (2-3), polypropylene (2-3), corrugated boxes (2), galvanized steel coils (10), stainless steel fasteners (8-10), plastic bottles (4) and large pumps (21-39).

Philadelphia: Specialty fasteners, now at 5-8 weeks, are expected to come in. Special bearings have already narrowed (to 12-14), as have round stainless bars from the mill (8-10). Unchanged are standard valves (5-8), electric motors (14-16), and specialty 5-10 hp motors (12).

Pittsburg: basically a quiet month—with these typical weekly leads prevailing: Multiwall bags (6), plastic bags (3-4), corrugated and folding boxes (3-4), wirebound boxes (4-5), fiber and steel drums (1), lumber (3-4), waterproof paper (8), steel strapping (2-3), painted seals (6-8), polyethylene (6), and PVC (6).

Leadtimes (in weeks)

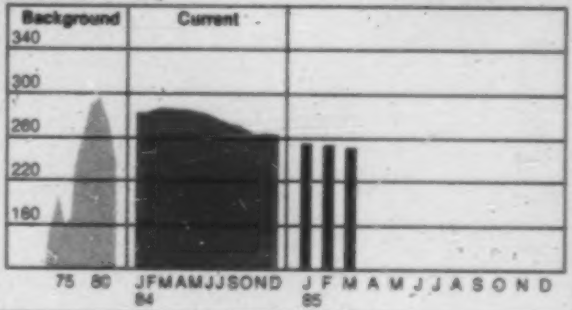
	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	4½	4½	9
C-R Sheet (Chgo)	7	7	5
Plate (Phil)	3½	3½	10
Plate (Chgo)	2½	2½	2½
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	7	7	7
H-R Bars (Chgo)	3	3	3
Cold-Drawn Bars (Phil)	7	7	7
Galvanized (LA)	13	13	14
Galvanized (Chgo)	7	7	11
Structurals (Chgo)	4½	4½	4½
Structurals (Hous)	17	17	17
Tubing (Phil)	7	7	7
Grey Iron Castings (LA)	6½	5	5
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	6	6	6
Pipe, Carbon (Hous)	13	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	13	13	17
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	7	7	7
ICs (Linear) (Phil)	15	15	20
Motors (Phil)	13	12	15
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	10	10	20
Relays (Chgo)	15	15	15
Resistors (Chgo)	10	10	14
Resistors, Wirebound (Phil)	8	8	10
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	2	2	2
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	⅛	⅛	⅛
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Napthalene (Chgo)	2	2	2
Paint (LA)	4	4	5
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	3	3	4
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	3	3½	3
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	6	6	1
PVC Resin (Pgh)	6	6	6
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	3	3	2½
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	6	6	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	11	11	11
Aluminum Plate (Chgo)	12	12	14
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	11	11	11
Brass Castings (LA)	7	6	7
Brass Rods (Chgo)	4½	4	6
Brass Sheet (Chgo)	4½	4½	9
Brass Tube (Chgo)	4½	6½	5
Copper Fittings (LA)	3½	8½	3½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	7	7	5½
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	2	2	4
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	5	5	5
Zinc (Pgh)	2	2	2
MISCELLANEOUS			
Bearings, Domestic (Phil)	22	22	22
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	50	50	50
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	1½	1½	1½
Fasteners (LA)	5	5	7
Fasteners, Std. (Phil)	2	4	4
Heat Exchangers, Carbon-alloy Steel (Hous)	21	21	20
Heat Exchangers, Hi-pressure (Hous)	31	31	35
Insulation Mat'l. (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	2½	2½	2½
Pumps (Hous)	30	30	35
Pumps (LA)	9	9	9
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	17	17	17
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

(Index: 1967 = 100)

Latest month	251.4
Month before	253.1
Year ago	289.2



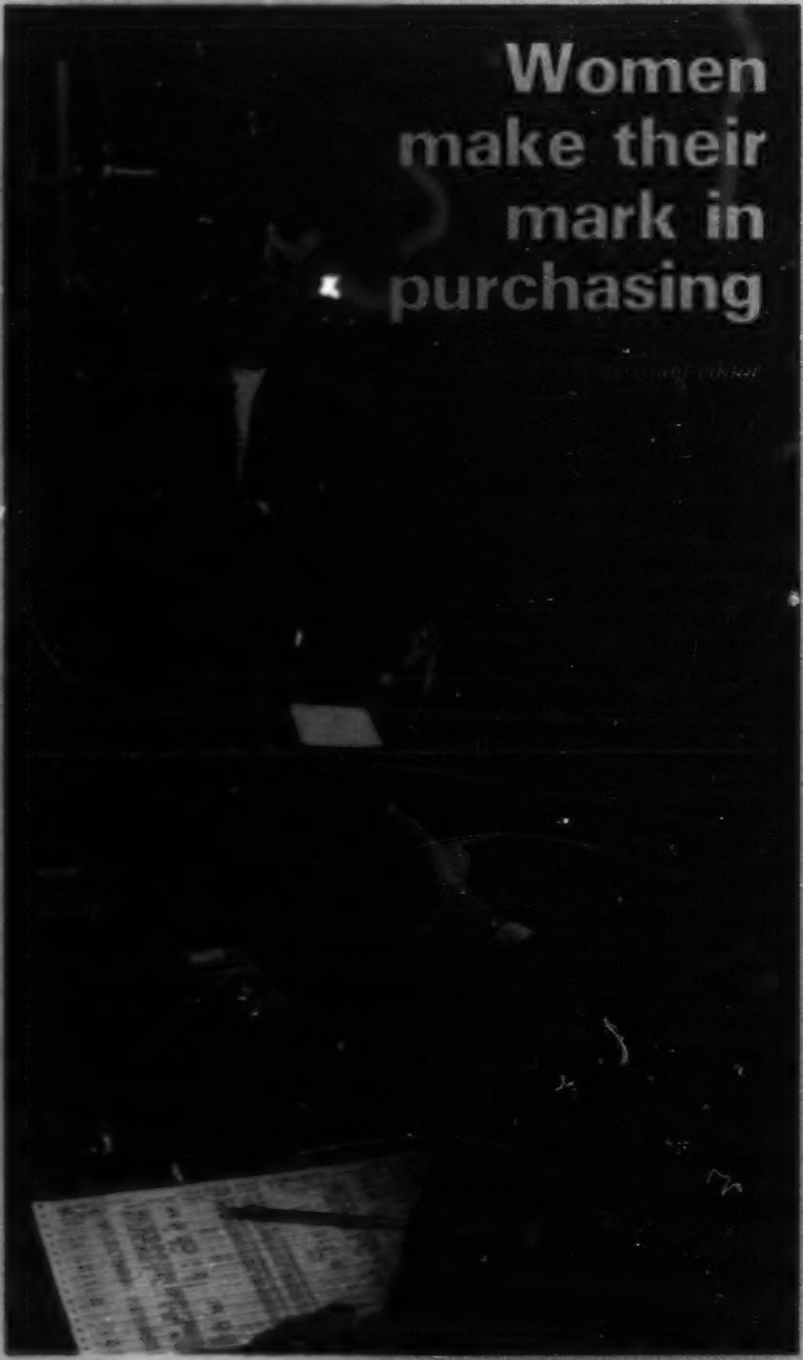
Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	347.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	25.10	25.10	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	23.95	23.95	17.50
Steel, bars, Pitts., cwt.	28.25	23.95	17.50
Steel, bars, C.R., Pitts., cwt.	29.25	29.25	26.00
Steel, plates, Pitts., cwt.	23.95	23.25	23.25
Steel, plates, H.R., Pitts., cwt.	23.25	23.25	23.25
Steel, sheets, C.R., Detroit, cwt.	27.10	27.10	27.10
Steel, strip, C.R., Chi., cwt.	35.30	35.30	35.30
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.518	0.513	0.698
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cast ingot, lb.	5.35	5.35	5.20
Brass, red, 85%, [sheet], lb.	1.32	1.27	1.30
Brass, yellow, [sheet], lb.	1.27	1.22	1.25
Cadmium, ton lots, lb.	1.25	1.25	1.50
Copper, electrolytic, wire bars, refd., lb.	0.69	0.64	0.75
Copper sheet, over 24 in., lb.	1.41	1.36	1.39
Lead, common, N.Y., lb.	0.20	0.17	0.26
Magnesium, pig ingot, [99.8%], lb.	1.48	1.48	1.43
Mercury, 20 fl. lots, N.Y., fl.	300.00	304.00	322.00
Molybdenum Climax Oxide/bags, lb.	4.65	4.65	4.65
Nickel, electrolytic, producer, lb.	3.20	3.20	3.20
Platinum, producer, oz.	475.00	475.00	475.00
Silver, N.Y., oz.	6.74	5.75	9.23
Tin, Straights, N.Y., lb.	6.03	5.60	6.36
Zinc, Prime West, East St. Louis, lb.	0.47	0.47	0.53
Zinc, die casting alloy, No. 3, lb.	0.535	0.515	0.595
PAPER			
Uncoated book #3 offset, ton	850.00	850.00	810.00
Watermarked bond, ton	985.00	985.00	985.00
Gummed sealing tape, carton	16.25	16.25	15.45
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	495.00	495.00	475.00
Wrapping paper, std. distributor cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	320.00	320.00	320.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	0.361	0.361	0.306
Cotton drill, 1.85, 59", 68x40, N.Y., yd.	0.85	1.03	1.04
Cotton middling, 1", N.Y., lb.	0.636	0.620	0.763
Printcloth, 48", 80x80, N.Y., spot, yd.	0.65	0.66	0.82
Army duck, 37", 13 oz., yd.	1.70	1.96	1.79
Blended printcloth, 64", 78x54, yd.	0.730	0.740	0.760
20s combed yarns	1.95	1.95	2.19
Wool tops, N.Y., lb.	3.60	3.60	3.60

	Latest price	Previous month	Year ago
CHEMICALS			
Acrylonitrile, tanks, lb.	0.455	0.455	0.455
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	210.00
Benzene, petroleum, tanks, Houston, gal.	1.45	1.23	1.48
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	0.58	0.58	0.56
Formaldehyde, USP, 37% [12% to 15% meth.], tanks, lb.	0.106	0.106	0.106
Glycerine, synthetic, tanks, lb.	0.86	0.86	0.81
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.54	0.54	0.45
Naphthalene, crude, tanks, lb.	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.305	0.305	0.305
Polyethylene resin, low density liner film grade (market price), lb.	0.280	0.280	0.415
Polypropylene, homopolymer grade (market price), lb.	0.330	0.330	0.415
Polystyrene, general purpose grade (market price) lb.	0.34	0.34	0.42
Shellac, bone dry, N.Y., lb.	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.26	0.26	0.35
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	157.50	157.50	140.00
Sulphuric acid, 66%, commercial, tanks, ton	56.85	56.85	56.35
Titanium dioxide, anatase, reg., carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.	1.36	1.26	1.35
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	302.00	303.15	324.15
Lumber, 2x2, pine, mbf, cl	300.35	301.70	324.45
Plywood, plyform, ¾", msf, cl	570.20	569.65	570.30
Plywood, ⅝", msf, cl	372.10	375.35	371.40
Cement, bulk, ton, tl	64.76	64.46	62.44
Sand, ton, cl	6.21	6.20	6.19
Ready-mix concrete, 3,000 psi/cu.yd., 15 cu. yd.	47.39	47.56	45.67
Crushed stone, 1½", ton, cl	7.57	7.52	7.87
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.79	0.79	0.76
Gypsum sheathing, ½"x1"x8", msf, tl	206.44	206.69	198.97
Brick, common, per thousand, tl	179.89	179.89	173.86
Asphalt paving, AC-20	175.08	174.64	163.82
Concrete sewer pipe, 12", prem. joint, per foot, cl	7.22	7.19	[illegible]
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf, bbl.	23.85	25.50	27.50
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	29.75	31.25	31.40
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.855	0.785	0.860
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.810	0.740	0.830
Heating oil, No. 2, Chi., bulk, gal.	0.765	0.730	0.800
Heating oil, No. 2, N.Y., bulk, gal.	0.818	0.808	0.873
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.50	26.50	26.25
Jet kerosene, gal.	0.743	0.748	0.800
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.355	0.365	0.425
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	85.00	92.00	102.00
Steel, No. 1, hvy., dlvd., Chi., ton	79.00	84.00	84.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	0.575	0.545	0.655
Copper, No. 2, East, wholesale buy,	0.500	0.480	0.580
Brass, red, East, wholesale buy, dlvd., lb.	0.535	0.505	0.615
Brass, yellow, East, wholesale buy, dlvd., lb	0.350	0.340	0.398
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	0.325	0.340	0.505
Alum., mixed clip., E., wholesale buy, dlvd., lb.	0.345	0.380	0.515
Zinc, old, East, wholesale buy, dlvd., lb.	0.140	0.140	0.185
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.100	0.080	0.145
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	15.00	20.00	32.00
Paper, old corrug. box, dlr., N.Y., ton	10.00	10.00	29.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.100	0.120	0.135
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.28	0.30	0.34

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

When several respondents to PurchasingWorld's survey of women in purchasing asked why PW was doing a story on "just women in purchasing in the first place," we weren't all that surprised. Their point: singling women out from their male colleagues does them no favors.



Women make their mark in purchasing

It took six months of hard work for **Eileen Kaplan** *to establish a working purchasing department. As purchasing manager for Software International, a subsidiary of GE Information Services Co. (GEISCO) in Andover, MA, Ms. Kaplan and her staff coordinate the purchase of supplies and services needed to produce software products.*

Their reaction demonstrates just how far women have progressed in the field of purchasing, and, as the survey suggests, they don't want to stop there.

Polaroid Corporation's director of worldwide purchasing, Warren E. Norquist, believes that the purchasing field has opened considerably to women today. "Twenty years ago women weren't a factor in the field because, with few exceptions, they weren't competing in it. Today they are competing and are doing it very successfully."

Polaroid, like many other major U.S. corporations, is doing everything it can to encourage professional growth by all members of its purchasing department. The team spirit and sense of opportunity at Polaroid are clearly exemplified by the fact that during interviews for this article, the women in its purchasing department suggested that no individual be singled out for our cover. It made good sense to us and explains why 11 of the 12 (one woman was unable to make the photo session) are featured.

In sheer numbers women are entering the field at a rate unknown in the past. The number of female members of the National Association of Purchasing Management has grown to 13% (of a total membership of over 28,000) and more than 22% of NAPM officers are women. Moreover, they are aggressively developing their skills through formal education. And you get the feeling when talking to them that those who have been in the field for any length of time would put their experience up against anyone's—male or female.

On the following pages you will read about the results of interviews and of the survey of purchasing women's work experiences, backgrounds, and about how they view their jobs.

There is virtually no product produced or service performed that is not influenced at the purchasing level by women. Survey respondents perform the purchasing function for computer firms, gold mining outfits, electronics and electrical companies, cosmetics manufacturers, insurance companies, printing firms, and food processing plants. Their titles range from vice president of purchasing to junior buyer,

...continued

Purchasing has become a family affair for **Mary P. Bertolo,** a purchasing agent and traffic manager for Champion Spark Plug Co. in Detroit. Ms. Bertolo, 54, has been in purchasing for 16 years and has two daughters who are also involved in the field. She didn't pressure them into purchasing. "They learned about it gradually by observing me in action over the years." Ms. Bertolo followed a fairly common route to purchasing management—she began as a purchasing secretary and worked her way into her present position.

with experience ranging from 6 months to more than 50 years. (See survey results for more specific information.)

Paths to purchasing

Most of the women surveyed who have been working in the field for a number of years happened into their buying careers by being in the right place at the right time. Many of them began their careers as secretaries or clerks in purchasing departments and gradually learned the purchasing function. As their male bosses retired or were promoted, they moved into positions as buyers and expeditors.

Seven out of ten women in the survey followed this path to purchasing. One of them, a 58 year-old purchasing manager at an aircraft machining company, started out 33 years ago as secretary to the purchasing director. The fact that her boss, in her words, made her "do most of his work along with her own duties" turned out to be a blessing in disquise. When he retired she was right in line for his job because she was the the only one trained to do it.

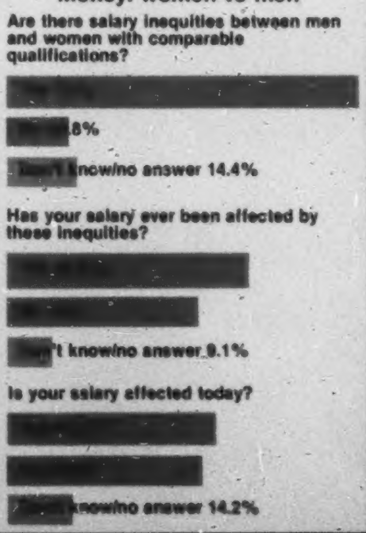
Another 17.5% said that they had been transferred from other departments into purchasing. In personal interviews, several of them made it very clear that the move represented real opportunity and advancement—not just a move to a dead-end position.

They came from just about every department—from chemistry labs and accounting offices to computer operations and marketing—for some very specific reasons. Several were given the job of establishing separate purchasing departments within their companies and were chosen for promotion because of their organization skills and their ability to work well with people.

Other survey respondents said they were moved to purchasing because they had demonstrated the skills necessary to do a good job in purchasing. "Management said I was aggressive, organized, thorough, and able to handle a million details at once," explained a 30-year old software buyer from California who was transferred to purchasing from the marketing services department of her company.

A small but growing number of young women are *choosing* purchasing as their major in college and are being recruited by companies after graduation. The number of women entering the field directly this way is still small—only 5.8% of our survey group—but this should change as formal degree programs with majors in purchasing, like those at Florida State University and Arizona State University , begin to attract more interest.

Money: women vs men



Linda Horan has distinguished herself both on the job and through her involvement with the NAPM. Ms. Horan, 37, was recently promoted to materials manager for the Additive Products Division of Kollmorgen Corp., Aquebogue, NY. She also serves as president of the Purchasing Management Association of Long Island.

The push for technical smarts

The importance of higher education is underscored by the number of major companies requiring that their purchasing people have degrees. For example, GE hires only degreed individuals (preferably technical degrees) for its purchasing departments. And GE purchasing personnel without degrees are strongly encouraged to go back to school to get them.

Indeed, 28.2% of the *PW* survey sample have graduated from college or have pursued advanced degrees, and another 36.6% have completed some college work.

One main reason cited for this emphasis on education: the increased need for technical skills (engineering, computer science, statistical planning). It is clearly becoming more important that purchasing people be able to communicate knowledgeably with their technical counterparts.

Progressive firms like GE, IBM, and Polaroid are sponsoring seminars and other continuing education courses for their purchasing people, according to survey respondents. NAPM seminars and those of other professional groups are popular with many companies.

Lynda Horan, materials manager at Kollmorgen Corp., Aquebogue, NY, and President of the NAPM Long Island Chapter says that

...continued

women (and men) would be crazy not to attend the programs offered by professional groups. "A real purchasing pro is hungry for all the information and professional enrichment she can get her hands on." she says.

What programs would women like to see more of? Our survey respondents said they want more of the following (in order of preference): negotiations skills, technical interpretation, assertiveness training, stress management, inventory and materials control, and legal aspects of purchasing. These are valuable topics for men in purchasing too. But some of the seminar topics mentioned by survey respondents wouldn't be—at least 50% said they wanted to take seminars on how to deal effectively with sex-biased male coworkers.

Despite the growing importance of education for purchasing professionals, interviews with more than a few women show that there still is no substitute for experience—especially in purchasing. "It's a craft. It's not a job that can be learned in a classroom. You can't be taught how to strike a deal with a difficult supplier or to find true value in a product," says a materials contract manager for a large steel sheet manufacturing firm.

Donna Ackerman is a good example of a young woman who has entered purchasing by choice. After three years as a purchasing secretary, she received her degree in purchasing and materials management at Florida State University in 1983 and was recruited by IBM Corp. As a procurement assistant for IBM in Poughkeepsie, NY, Ackerman buys plastic parts for large mainframe computers.

Money matters

The most lively responses were to the questions in the *PW* survey dealing with salary issues (see accompanying chart). When asked if they thought that salary inequities existed between men and women with equal qualifications, not surprisingly, 75% said yes.

A lesser number—50.8%—said they had actually experienced wage inequities themselves at some time during their careers. And a somewhat smaller percentage (44.1%) indicated that they were presently being discriminated against—possibly a positive sign that things are getting better.

Most of the women who made comments on this subject asked to remain anonymous. Their responses were candid:

- "For performing the *same* job, a male coworker and I worked with a $15,000 difference in salary."
- "After 5 years on the job I still make less than the man I replaced."
- "The male managers within my company are paid between $10,000 and $25,000 more than I am—with equal years of experience."
- "In my company there are subtly imposed time lags for raises and promotions that don't exist for the men here."

Many of the 25% of respondents who did not believe that salary equity was a problem, work for compa-

Survey Profile : The real woman in purchasing

(1) What is your title?

Buyer	30.8%
Purchasing Manager	18.3%
Purchasing Agent	17.5%
Junior Buyer/Expediter	11.6%
Senior Buyer	9.1%
Vice President/ Director of Purchasing	4.1%
Other (purchasing related)	8.2%

(2) What is your age?

25 or under	4.1%
25 to 34	30%
35 to 49	51.6%
50 to 64	12.5%
65 +	1.6%

(3) What is your highest level of education?

Advanced Degree	3.3%
Attended Graduate School	6.6%
College Graduate	18.3%
Attended College	36.6%
High School Graduate	32.5%
Attended High School	2.4%

(4) If you attended college, what was your major area of study?

Business Administration	61.3%
Liberal Arts	15.9%
Sciences	10.6%
Economics	6.1%
Other	6.1%

(5) How many years have you worked in purchasing?

5 years or less	25.8%
6 to 10 years	38.3%
11 to 15 years	20.8%
16 to 20 years	10.8%
21 to 25 years	1.6%
Over 25 years	2.5%

(6) What is the major product or service produced at your facility?

Food/Consumer Products	22.8%
Machinery/Tools	21.1%
Electronics	15.3%
Computers/Software/Service	9.5%
Government/Defense-Related	9.5%
Chemicals/Pharmaceuticals	7.8%
Utilities/Energy	7%
Primary Metals/Mining	6.6%

(7) What is the approximate number of employees employed by your company?

Less than 100	18.3%
100 to 299	22.5%
300 to 499	14.1%
500 to 999	11.6%
1,000 to 2,499	8.3%
2,500 to 4,999	6.5%
5,000 +	18.4%

(8) What is the approximate number of employees at your facility?

Less than 100	27.5%
100 to 299	30.8%
300 to 499	10.8%
500 to 999	15%
1,000 to 2,499	9.1%
2,500 to 4,999	1.6%
5,000 +	4.9%

(9) How many employees are in your purchasing department?

5 or less	56.6%
5 to 10	17.5%
11 to 20	10.8%
21 to 49	4.1%
50 +	10.8%

(10) How many employees do you supervise?

5 or less	73.9%
5 to 10	19.5%
11 to 20	6.2%

(11) What is your average annual salary?

Under $15,000	5%
$15,000 to 24,999	45%
$25,000 to 39,999	43.5%
$40,000 to 59,999	4.9%
60,000 to 74,999	0%
$75,000 and up	1.6%

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* Percentages calculated to nearest 10th.

Through her work in establishing a "Women in Purchasing" committee for the Purchasing Management Association of Chicago, **Eileen Brottman** has seen evidence of positive change for women in the field. She thinks that groups such as this are very helpful to women and she is helping other NAPM chapters establish similar committees. Ms. Brottman, who is purchasing manager for Dawes Laboratories, a manufacturer of animal vitamin premixes, has been in purchasing for over 15 years.

nies that have documented, rigid formulas for compensation, or that have adopted policies for fairness. One buyer at a Texas oil refinery says that her company "has a strict policy for determining salary—based on years of experience, level of responsibility, education, and professional credentials. Rewards for exceptional work come in the form of promotions and cash bonuses."

Many of the survey responses indicated anger about salary issues—this is not unique to the purchasing profession. What is unique is that because so many women began as clerical workers at low starting salaries, it takes them much longer to reach parity. And some may never reach it.

What must women do to remedy the problem? Says one engineering products purchasing manager with 30 years of experience, "You fight back by getting your C.P.M., by getting your college degree, and by doing everything you can to be terrific at your job. Respect breeds responsibility and responsibility brings rewards."

Their career concerns really aren't much different from those of men in purchasing. Under the larger heading of professional concerns come issues like gaining professional respect from colleagues, overcoming the "old boy" network, and advancing to responsible positions. But it also includes some more sweeping concerns about how the economy will affect job security and how a purchasing professional can positively impact a company's bottom line. When asked—"What is your greatest professional concern today?," they responded:

- "The economy. My company has gone through some very hard times. My concern is that if this does not reverse, my job and a lot of others will be eliminated."—from a buyer for a farm equipment manufacturer.
- "The greatest concern is the lack of understanding by upper management of the real dollar value of purchasing. If it doesn't recognize the value of our function, then it certainly won't recognize MY value."—from a senior buyer at a machine tool plant in Georgia.

Barbara M. Donnelly, C.P.M., a senior purchasing professional for the National Packaging Group of Johnson & Johnson Co., is also a member of the Board of Directors of NAPM. She believes that career advancement will be hindered if women do not receive blunt and accurate feedback of their performance on the job just as men do.

- "I hope that I can keep up with technical advances and can continue to develop tactics and resources for rapid company expansion."—from a buyer for a power machine manufacturer in Texas.

But we also found comments that indicate their uniquely female perspective of business:

- "My concern is that even now, if a question is posed the answer will still be sought from a man"—Nancy Barney, manager of purchasing for Ristance Corp., Bremen, IN.
- "That my accomplishments and chances for promotion will be considered equally with my male coworkers."—from a senior buyer for the Libby Corp.

Most women seem to be confident of their abilities and capable of handling the pressures of their jobs. A major hurdle in gaining professional recognition is a problem of perception of ability, says Rosemary Schoenberger, purchasing manager of VIP Engineered Products Corp. in Illinois, and an active member of the Organization and Planning Committee of the NAPM. "A woman may have a problem in communicating her abilities positively, so others may not know what she is capable of doing," Schoenberger explains. But many women in higher level purchasing management positions think things are getting better.

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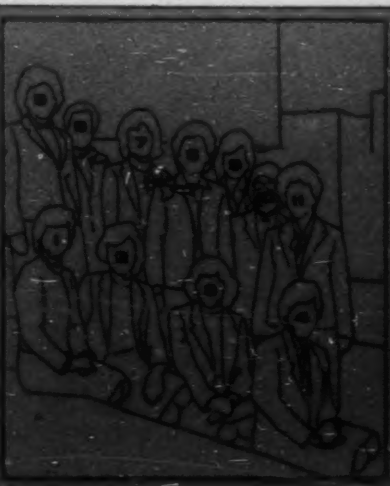

About our cover

The eleven women featured on our cover are all salaried purchasing professionals for Polaroid Corporation in Waltham, MA.

Seated (left to right): 1. Pamela Trunos, senior administrator-purchasing; 2. Gretchen Eisnor, senior buyer; 3. Claire Potaro, associate administrator-purchasing; and 4. Collette Anderson, senior buyer.

Standing (left to right): 5. Mary Adair, senior administrator-purchasing; 6. Jane Cameron, purchasing administrator; 7. Rita Shea, buyer; 8. Alyce Gelenian, buyer; 9. Judith Tagle, buyer/planner; 10. Margaret Marsh, buyer; and 11. Katherine Philis, buyer.

Missing from photo: Marilyn Dibrola, [illegible]

On the job

An overwhelming 94% of the women surveyed say they would recommend purchasing as a career to a young woman entering business, and 85.5% say that they are getting personal satisfaction from their work. This is surely a good indication that women feel very good about their profession. The 6% who would not recommend it generally did so because of bad personal experiences in their careers. "Purchasing is a fascinating field. You have the opportunity to be involved in all phases of production and planning on a daily basis. How well you do your job directly affects the bottom line of the company," says Joanne Mayer, a senior buyer for Bendix Corp.

Many of the women we interviewed said that the purchasing field is not attracting the numbers of women that it should because college career advisors know very little about it. One purchasing manager who is very active in alumni activities at her college suggests that women who are in the field get in touch with placement offices at their alma maters and let the counselors know about career opportunities.

Challenge and satisfaction

The collective response of the women answering the *PW* survey is clear—the overwhelming majority are content in their jobs and believe that opportunities will continue to open up for them in this field.

Their comments about their jobs were not just glowing reports of personal fulfillment. Many women took a realistic, honest look at what they do and decided that, on balance, purchasing is a good way to make a living. One woman, a food packaging buyer in her mid thirties, summed it up well. "No job is perfect. In fact I've come home exhausted and frustrated after work many times. But each morning I go back to work ready to face a new challenge. That's true job satisfaction." **PW**

We'd like to hear about your own on-the-job experiences in purchasing as well as your reactions to some of the issues discussed in this article. Please write to us.

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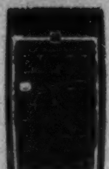

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Survey of the month: Imports

It's a one world economy

Imports are higher than ever on the agendas of most purchasing executives these days. Latest figures show that incoming shipments rose a hefty 26% in dollar terms last year. And the figure is probably even higher in volume terms since import tags have actually been lower.

More significantly, another somewhat smaller advance is in the cards for 1985. Much of the upward impetus comes from today's superstrong dollar which makes import bills calibrated in dollars a lot lower than they would be if they were valued in overseas or local currencies.

As of a few weeks ago when the survey was taken, the dollar had appreciated close to 50% relative to levels of mid-1980. That provides a pretty powerful incentive to go the import route. Buyers would seem to agree—more than half the survey respondents called the dollar "significant" in keeping import quotes down.

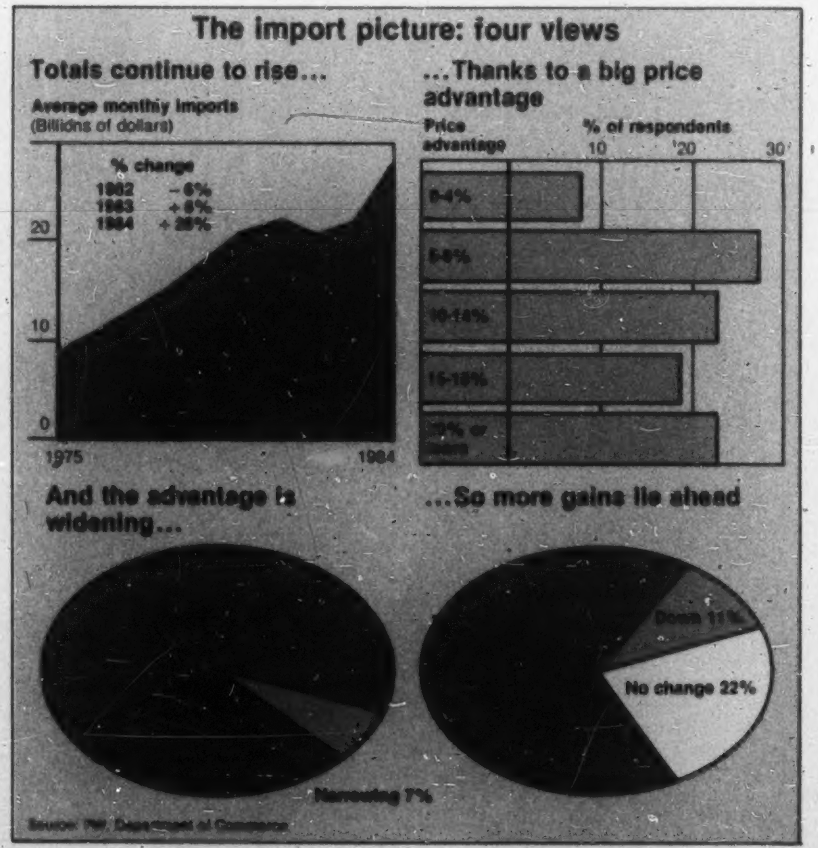
But the strong dollar isn't the only factor behind the import runup. Lower foreign production costs, excellent foreign quality, and the need for bargaining leverage to keep domestic vendors in line are all helping to keep imports strong.

With these factors in mind, it's easy to see why imports accounted for nearly 24% of the U.S. market for manufactured goods last year—nearly double the 14% reading of 1982.

The new *PW* Survey tells the story best:

Recent import price trends: Nearly three out of every five respondents said that the average tags of incoming goods have dropped over the past year. And, 31% put the decline at 5% or higher.

The import price advantage: It is not surprising that incentives to buy abroad have actually been increasing—especially since the prices of most comparable domestic goods have remained relatively stationary. Some 63% of those queried report widening of the price advantage. Only 7% of survey respondents note some narrowing.



The import picture: four views

Totals continue to rise...

...Thanks to a big price advantage

And the advantage is widening...

...So more gains lie ahead

Source: PW, Department of Commerce

Quantifying the price advantage: These days the average purchasing executive pays about 15% less for imported goods than he does for comparable domestic items. And 23% of those queried say they are getting 20% or bigger price breaks by going the foreign route.

Where the bargains are: Good bargains are now said to be available in product lines ranging all the way from basic raw materials to high-tech, sophisticated manufactured products.

Some of the items noted frequently in the survey include steel, copper, aluminum, castings, bearings, fasteners, organic chemicals, plastic resins, textiles and apparel, tires, machine tools, farm equipment, internal combustion engines, farm equipment, construction machinery, computers, and electronic components.

The 1985 volume outlook: More gains are seen ahead. Two out of every three buyers surveyed are contemplating import increases this year. A smaller 22% see no change and only 11% of respondents felt that their import totals might drop this year.

The attitude is perhaps best summed up by one East Coast purchasing executive who observes, "We have initiated a world-wide sourcing effort—and will consider any foreign product that offers a 20% or higher price break."

While price is the biggest consideration, there are other factors adding to today's import splurge. Many survey respondents cite (1) better quality and service, (2) a need to keep the pressure on domestic suppliers, and (3) countertrade requirements.

And in a few cases, some say they have no alternative: The products they need are just not available on the domestic market. In any case, all agree that imports have become a way of life—and that the one-world economy is here to stay. **PW**

NOTE

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PurchasingWorld. *Helping you manage —the business of buying*

Vol. 29 No. 6-June 1985

Special report: PACKAGING

50 Packaging is one of year's best buys
A recent *PW* survey shows that buyers intend to be very aggressive in packaging buying. In this highly competitive, $60 billion-a-year industry, price increases are expected to hover around 2%—half that of last year's hikes.

58 *Cover Story:*
Packaging takes on new high tech forms
Continental Can Corp.'s new "materials indifferent" approach to packaging design encourages creative solutions to customers' needs with the help of innovative computer assisted design.

62 It's in the bag, box, bottle, can
For the packaging buyer, the fast paced changes in the field spell opportunity. Packaging developments are literally exploding on the scene, giving buyers plenty of choices and lots of room for cost saving.

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Enter PW's
Crystal Ball
Contest

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Features

72 How to get started in EDI
The experts predict that virtually every company will soon have to install some kind of electronic data interchange (EDI) system to stay competitive. Here's how EDI systems can improve your company operations and how several major industry groups are planning to use EDI to streamline their business.

90 Quarterly Transporation Report—
The kind of year(s) a shipper can live with
Wharton Econometrics forecasts only about a 3.3% overall transportation rate hike for this year. And the extended outlook by mode is equally as easy to live with for buyers.

PW10* Steel still dominates food can market
Holding its dominant place in the food can business, steel accounts for 96%, or 26.5 billion cans, of the 27 billion food cans produced annually. Developments in the industry show why steel still dominates.

Cover Photo: This month's cover features Continental Can Co.'s new fully integrated graphic design and production services, CIRCA Inc.—an advanced computer assisted design system specifically tailored to the packaging industry. See story on page 58.

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PW PREDICTS

Robert S. Reichard, executive editor

Firming in prices coming

Keeping prices on a relatively even keel may not be quite so easy from here on in. One reason is that productivity increases have slowed. Factory efficiency gains, which ran at about a 3% rate last year, are beginning to slow down in line with the slower pace of industrial production.

Right now, a 1.5% overall productivity boost is anticipated for 1985. Superimpose this on last year's 4.5% average pay boost—and you end up with about a 3% increase in unit labor costs.

This is nothing like the double digit advances of a of a few years back, but it does signal a change from last year when this bellwether yardstick of cost pressure on prices rose by only about 1%.

The modest erosion in the dollar could be another factor leading to a price speedup. Though nothing spectacular has happened, it does represent a change from last year when the dollar appreciated 15% *vis a vis* the currencies of our major trading partners.

Other things being equal, a weaker dollar means that overseas sellers are now more likely to raise prices than lower them (as many did last year).

And in the energy sector prices are expected only to inch up. But this represents a change in performance from last year when overall energy tags actually declined by 5.5%.

To sum up: The three factors (labor, the U.S. dollar, and energy) are no longer working on the side of smaller price increases. That does not mean that we are on the verge of an inflationary spiral. Competitive pressures (both U.S. and European factories are still operating in the low 80% range) would certainly seem to oppose this scenario—especially if Free-World economies continue to grow at today's relatively slow 3% annual rate.

On the other hand, these changing trends do seem to suggest that price boosts rather than declines will become increasingly likely—if not over the next few months then certainly toward year end and into 1986. With the above in mind, *PW* has revised its projections—the GNP deflator will slowly begin to accelerate at about a 4-5% annual rate over the next few quarters.

A similar trend is seen for industrial producer prices—the area of more immediate concern to purchasing executives. Analysts at Wharton Econometrics put the increase in industrial tags over the next two quarters near 2.5% at annual rate, and perhaps at a 3% pace by early 1986.

Finally, the cost-of-living picture is pretty much the same. Some acceleration, reflecting higher gasoline prices, is already evident. The first quarter 1985 advance is put at near 4% at annual rate (vs only 3.2% for the previous three-month period). In short, this is no time to let down our inflationary guard.

PBXs

Don't count on prices of private branch telephone exchanges (PBXs) declining.

Quotes could even edge up a bit over the next few years despite the combination of intensifying competition and technological advances. Reason: a gradual shift to more expensive digital systems.

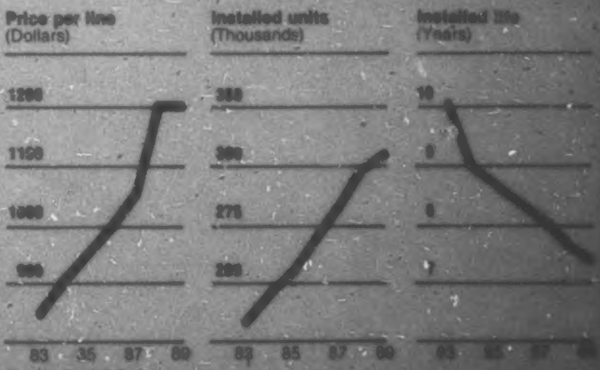
Frost & Sullivan Inc. puts the average price per line in the $1,200 range by 1989—a steady advance from this year's $950 estimate and the $1,050 projected for 1987.

Higher price tags won't stop growth but the rate of advance should slow down as saturation levels are gradually approached. Frost & Sullivan thinks sales will advance about 5% annually over the next few years—sustained by replacement purchases.

The impact of replacements can be appreciated if one considers the fact that this year replacements will outnumber new sales by an almost 2:1 margin. The growth of the replacement market is largely because the installed life of the typical PBX is shrinking as advanced features become standard and as software upgrades proliferate. The average installed life of a PBX, which has already fallen from 10 years in 1983 to 8.7 in 1985, could drop to 7.5 in 1989 and to only 6.3 by 1993.

Whether replacement or first-time sales, the number of installed systems is growing impressively. There should be as many as 311,100 systems in operation by 1989—compared to only 254,700 expected this year. Smaller systems (0-99 lines) will continue to dominate, accounting for roughly three of every five installations.

PBX market trends



Source: Frost & Sullivan

PW PREDICTS

Steel

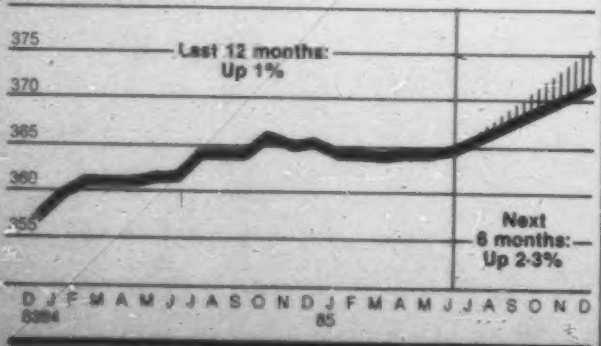
CURRENT SITUATION: **Buyers are still calling the signals** as lackluster demand, lingering overcapacity, and continued import competition combine to keep tags under pressure. Only a few of the recent price boosting attempts have been successful. **Flat rolled products are especially soft.** Distributors and users are receiving discounts ranging from $60-130/ton off list. Why the easiness? Imports have continued to flow into the country and accounted for 28% of the market this past quarter.

DEMAND: **The second quarter looks better than the first** when only 18 million tons were shipped. But even if you factor in a good spring and summer, U.S. mills will probably ship only 76 million tons this year—only 2.5 million more than in 1984. Low consumption is a problem—**only 97 million tons are likely to be used by U.S. factories this year.** That's just 1.5% above 1984. Larger gains are seen for trucks, construction, machinery, and rail equipment.

SUPPLY: **No problems anywhere as domestic mills continue to operate at or under 75% of their capacity. The impact of voluntary import restraints will be gradual so plenty of imports will be around—20% of the overall market this year. Another sign of ample supplies: Surveys suggest that buyers may soon be paring inventories.** Some reversal could occur in 1986 if the breakup of coordinated labor negotiations brings selective strikes.

PRICE OUTLOOK: **The combination of import restraints, improved demand, and a tightening cost-price vise clearly spell increases.** Advances in flat-rolled items seem inevitable by fall but they'll be in the form of reduced discounting so they won't show up in official indexes. Indeed, **the overall mill product index isn't likely to rise by more than 2-3% by year end.** A similar pattern is seen for 1986.

Steel prices (list)
(Index: 1967 = 100)



Copper

An early spring rally has run out of steam—several cents have been knocked off recent 72¢/lb highs. The lull is being caused by a drop-off in Japanese buying, so-so European and domestic demand, and a levelling of the U.S. dollar after recent declines. Nevertheless, the prognosis is still for higher prices ahead given falling exchange stocks and expectations of another 2-3% global consumption gain for 1985. Best bet: copper price tags at 75¢/lb by sometime this summer and 80¢/lb by the end of the year.

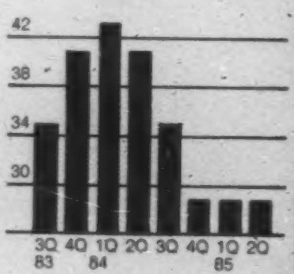
Printers

A new price war could be in the making, especially in the hotly competitive dot matrix area. A while ago, several Japanese producers cut prices as much as 30%—enough to bring one Epson low-end model down to about $299. And IBM has also entered into the fray by introducing a new low-priced letter quality dot matrix model priced at $549. It is said to be at least $100 under similar Japanese models. Tags could go even lower when volume production is achieved by IBM.

Polyethylene

The 2-4¢/lb increases announced for spring have not held up. In fact, with buyers continuing to call the signals, both the low-density liner/film grade and the high-density injection molding grade are still holding in the low 28-30¢/lb range—far under the 45¢/lb and higher official list levels. One reason: falling feedstock costs (ethylene has dropped 1.5-2¢/lb since the beginning of the year). And demand gains for 1985 are relatively slight. Overall LDPE and HDPE shipment increases are only 1.5% and 2.5% respectively.

Low density polyethylene
(liner/film grade)
(Market price ¢/lb.)



Aluminum

Weakness is still the order of the day. Signs of the times: (1) bigger discounts on common alloy sheet, (2) price reductions in plate, (3) the availability of cheap 45-48¢/lb imported secondary ingot, and (4) GM pressure for guaranteed prices over the 1986 model year. But some firming seems inevitable as U.S. consumption rises another 4% this year. Also production cutbacks are slowly narrowing the global supply-demand imbalance.

Some speak of 65¢/lb ingot by the end of 1985, but 60¢/lb looks more

Energy

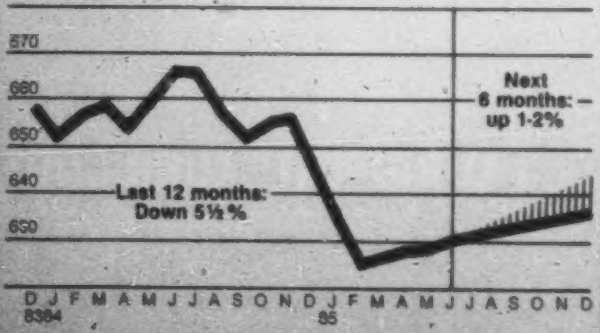
CURRENT SITUATION: No problems anywhere. Prices are no longer falling and there is little chance of any repeat of the big 5.5% overall drop of the past 12 months. However, everything is in ample supply. **And there's plenty of competition aided by less-than-anticipated demand gains.** Lest there be any doubt that buyers are still in charge, consider (1) recent declines in natural gas, (2) problems oil producers are having in maintaining recently reduced crude oil prices, and (3) shaky coal prices that are running $1-2/ton under last year.

DEMAND: Overall U.S. energy consumption for 1985 should reach only 75.4 quadrillion BTUs—up just 2% from last year. Growth could be even lower by early 1986 as conservation and decelerating GNP gains put a ceiling on consumption. One sure sign of the conservation impact: The declining GNP ratio (44.9 thousand BTUs per 1972 dollar of real GNP versus 47.9 three years ago). Best bets for 1985: **oil (no change), natural gas (up 2%), electricity (up 3%), and coal (up 5.5%).**

SUPPLY: Supplies are ample everywhere. In oil there are increasing signs that OPEC may have problems maintaining recently reduced production quotas. Moreover, non-OPEC oil continues to increase. And in natural gas the so-called gas bubble—defined either as "an excess deliverability against immediate demand" or as "a longer term surplus which may last for several more years"—shows few signs of disappearing. **No problems for coal mines or electricity generating capacity.**

PRICE OUTLOOK: Figure on nothing more than a very modest 1-2% increase over the rest of 1985. And this may be on the high side as (1) OPEC finds it hard to maintain or increase benchmark crude prices, (2) spot markets and cheap Canadian imports cap natural gas tags, and (3) competitive infighting puts pressure on coal.

Energy prices
(Index: 1967 = 100)



realistic—and it should be enough to put most producers back into the black for the first time in nearly a year.

Paper

Recent softness persists as mills are still unable to get much above $300/ton for their linerboard—some $50/ton under the official $350/ton list. Uncoated paper is not very firm either. A new $60/ton increase has just been posted, but chances of it having any real impact seem slim—as big buyers still report off-list deals and more-than-ample supplies. Also, a new 6.5% price boost for newsprint could be in trouble.

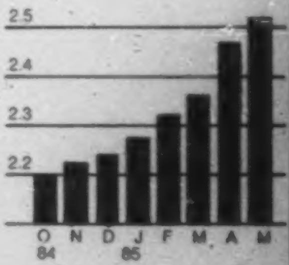
Moving service

Formal contractual agreements with van lines could mean substantial savings on relocating moves. A new nationwide survey finds that such agreements yield 20.5% average discounts—4% more than for firms that do not use this approach. Result: Some 77% of responding firms now use "contract carriage agreements"—nearly double the number of just two years ago.

Nickel

Prices have been firming—with cathode moving into the $2.50/lb range (up some 25¢ from earlier 1985 lows). Better-than-anticipated demand and an expected first half 1985 production-consumption shortfall are causing this upward pressure. Specifically, January-June demand is put at 685 million pounds—some 65 million above output. Result: Global stocks in the first half will be only 245 million lb. This could all prove temporary as new production comes on-stream, suggesting stabilization of second half stocks and maybe even a reversal of the recent uptrend by late summer or fall.

Nickel
(Cathode)
(Dealer, $/lb.)



Zinc

Softness is creeping into the market—despite a relatively closely balanced supply-demand situation. Buyers report substantial discounting—the going quote is only 45¢/lb. While there are still positive factors at work, namely (1) expectation of U.S. and global demand increases for 1985, (2) the closing down of a big Asarco refinery, and (3) the continuing threat of strikes. But this is balanced by ample overseas capacity and recent increases in U.S. user inventories. Best bet: barring a major strike, quotes will

PW PREDICTS

Trends in word processing

The word processing market is undergoing a major change as personal computers with word processing software become the preferred type of equipment.

Some 51% of office managers responding to a new Administrative Management Society (AMS) survey say they now use, or are thinking of using, PCs—a hefty 15% jump over 1984 levels.

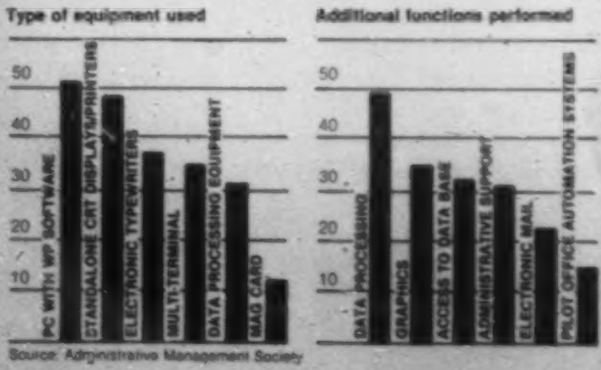
But use of both dedicated standalone CRT display/printers (48%) and electronic typewriters (37%) is actually declining. Other types of equipment used for word processing include multi-terminal devices (35%), data processing equipment with WP capacity (31%), and mag cards (12%).

And the trend toward PCs is continuing. A majority of firms (58%) who say they are considering WP equipment feel they will probably purchase PCs rather than dedicated word processors.

Other key findings of the new survey:

- 85% of the responding firms say they use some form of word processing—the same as last year but well above the 75% figure of 1983.
- Word processors are being used more intensively. Specifically, 46% of the respondents are already doing, or plan to do, over half of their typing on word processors—up from only 38% just one year ago.
- The most popular equipment is IBM (39%)—followed by Wang (14%).
- A majority of respondents use their word processors for functions other than word processing. The most common of these: data processing, graphics, access to central data bases, administrative support, electronic mail, and pilot office automation systems.

A detailed look at word processors
(Percent of respondents)



Source: Administrative Management Society

be relatively stable with averages holding at around 45¢/lb.

Semiconductors

Disappointing demand is forcing most manufacturers to reappraise earlier 1985 projections. One industry source now sees a sizeable negative number for the year—projecting a decline of more than 14% in overall dollar sales *vis a vis* 1984—with both integrated circuits and discreet types sharing equally in the decline. Add in a growing capacity glut—and prices are also expected to continue falling. All told, industry averages could be off about 8-10% for the year. Some memory chips may drop by as much as 20-30%.

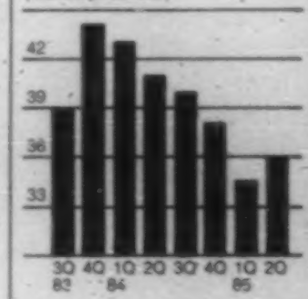
Chlorine

Two 1985 increases ($15/ton in January and $10/ton in March) seem to be taking hold. Blame it on high operating rates (80-85%) and rising demand from PVC makers. But tags still have a way to go before reaching official $195-205/ton lists. Thus even with the new hikes, Gulf Coast material is still only commanding $125/ton from big customers, and about $165 from medium-volume buyers.

Polystyrene

An April price increase seems to be holding up fairly well. Market quotes for the general purpose grade are now in the 35-37¢/lb range, (up 1-2¢/lb from previous levels). A recent 3-5¢/lb increase will probably run into buyer resistance because it follows too closely on the heels of an earlier boost. Also, operating rates are still averaging under 70%, and demand is not very strong (about a 2% overall increase is expected for 1985).

Polystyrene
(General purpose)
(Market price ¢/lb.)



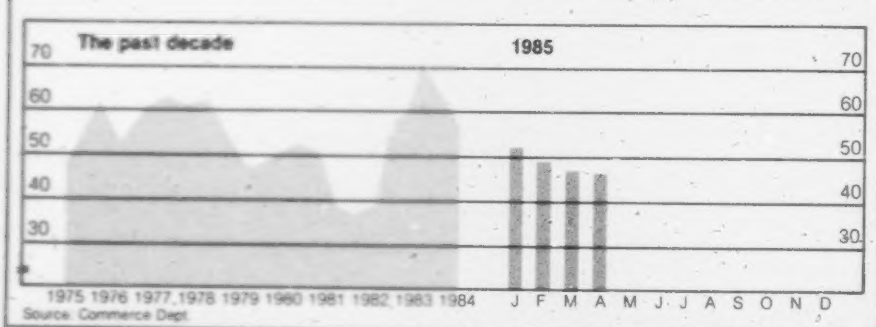
Lead

Tags have stabilized around the 20¢/lb mark—with the possibility of somewhat higher quotes ahead if current labor problems aren't resolved. The start of the battery buying season in a few months should also help to firm things up a bit. But don't expect any major run-up. For one, Asarco's 110,000 tons/year Missouri smelter won't be shutting down as had been feared. Producer inventories seem adequate and there is plenty of secondary capacity available if prices move above 21-22¢/lb (the producers' break-even point).

BUSINESS DATATRAK

NAPM business barometer

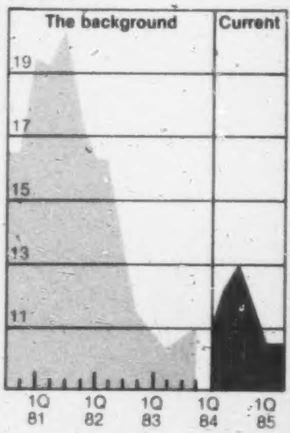
Based on five indicators (employment, inventories, new orders, production, vendor performance)



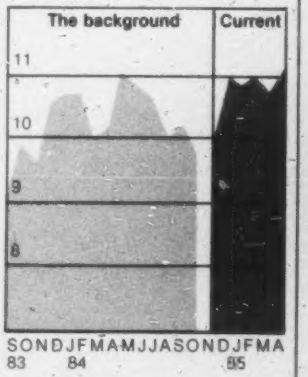
Source: Commerce Dept.

Leading indicators

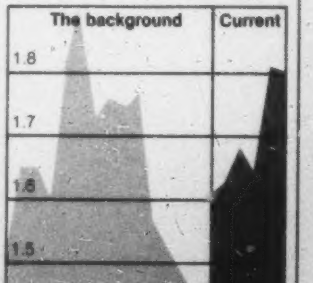
1. Prime rate
(Percent)



2. Auto sales
(Millions, seas. adj., annual rate)



3. Housing permits
(Millions, seas. adj., annual rate)



KEY ECONOMIC TRENDS

Don't write off recovery yet

The first quarter GNP advance of 0.7% may not be very impressive, but closer examination suggests that the economy is stronger than the number indicates.

A slip in disposable income, for example, can be traced to computer-delayed tax returns rather than to any inherent weakness. Also, GNP was negatively impacted by sudden widening of the trade deficit an equally erratic narrowing in fourth quarter 1984.

Both of the above have to be regarded as one-shot affairs. A much better measure of the economy's underlying vigor is real domestic purchases which advanced at a 4% annual rate in the first quarter—well above the 1% increase of the previous three months.

And both consumers and businessmen remain optimistic. The Conference Board Index of Consumer Confidence, for example, climbed nearly five points in April, erasing much of the previous month's decline. And top executives responding to another Board survey suggest that business confidence is again on the rise.

While the degree of confidence expressed by the surveys is under those of a year ago, it is moving in the right direction and that's what counts.

Other indications are also positive. Most important is the slow decline in interest rates—with the prime borrowing rate under 10.5%—matching the second quarter 1983 low and far under the 13% reading that prevailed as recently as last summer (see chart).

Keep in mind that other things being equal, lower rates foster both business and consumer confidence, which provide added incentive to make marginal purchases.

This is clearly evident in auto sales which in April jumped above an 11 million annual rate, the highest since the beginning of the current two-and-a-half year recovery cycle. Interest rates probably played an even more important role than suggested by the 10.5% prime rate, since a fair portion of the sales jump came from the 8.8% financing offered on some models.

The declining cost of money is also playing a role in housing. With conventional fixed mortgages dropping down to near 13%, both housing starts and housing permits have turned up.

Other signs of strength on the construction front would have to include (1) a rise in single family home sales (to the highest level in over a year), and (2) a 12% jump over the last month in building awards. The F.W. Dodge index is now close to last year's high.

This doesn't mean that GNP is ready to take off again. There are some strong negative factors present that temper some of the pluses, including (1) a continuing record import flow, (2) an expected slowdown in capital spending in the second half, and (3) less-than-sensational employment gains.

These and other factors help explain why NAPM's Business Barometer continues to bump along near the neutral 50 mark. But there are some healthy signs. New orders, the most important component of the barometer, are increasing.

What does all this add up to? Certainly nothing spectacular, but nothing negative either. The odds favor relatively modest GNP advances (about 3% at annual rate over the third and fourth quarters).

Survey offers guide to fleet managers

If you are looking for some guidelines on fleet car strategy, the National Association of Fleet Managers (NAFA) may be just what you need.

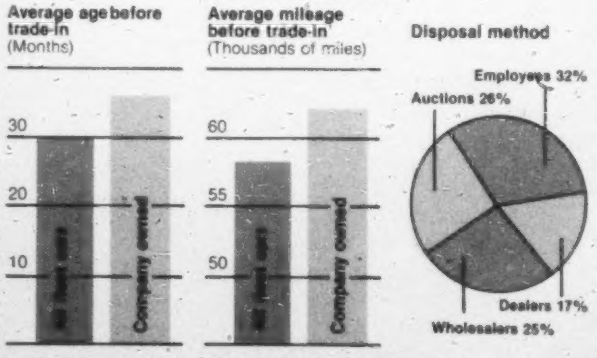
Some of the key findings—based on responses from some 143 commercial fleets with over 100,000 cars.

- **Lease vs ownership:** There is not too much preference here—with 53% of the respondents opting for leases and 47% preferring ownership.
- **Average car age before trade-in:** The norm runs at 2.5 years. But company-owned cars are held about three years on average.
- **Average mileage before trade-in:** The typical vehicle at trade-in has about 57,000 miles on the odometer. But there is a tendency to use company-owned vehicles more intensively—62,221 miles to be exact.
- **Disposal method:** Some 32% of the vehicles eventually end up in employee hands. The rest are disposed of as follows: 26% to auctions, 25% to wholesalers, and 17% to new or used car dealers.
- **Changes in replacement cycle:** Of the some 29 fleets who are shifting, 25 plan to shorten service life and only four contemplate extensions.

Another finding: Vehicles in both public utility and government fleets tend to be used more than those in commercial fleets.

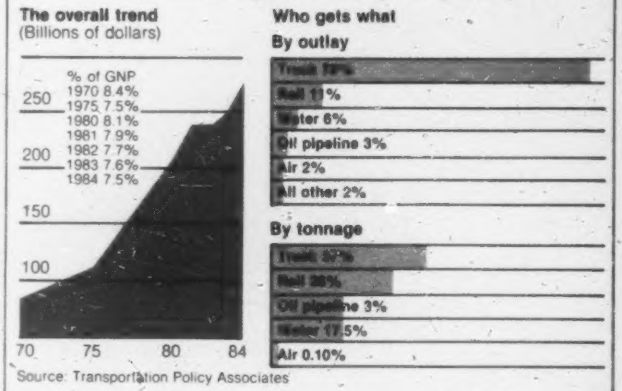
Specifically, the average utility car is held 68 months and driven close to 75,000 miles vs only 30 months and 50,000 miles for commercial fleets. Government vehicles are held about 57 months and are driven more than 81,000 miles before being traded.

A fleet car profile



Source: National Association of Fleet Administrators (commercial fleets)

How the freight industry shapes up



Source: Transportation Policy Associates

Freight bill at $275 billion; to climb in '85

American industry shelled out a whopping $275 billion to move goods from one place to another last year. That's 30% more than just four years earlier. And another good sized gain is seen for 1985.

The new figures are part of a recent study, "Transportation in America," compiled by Transportation Policy Associates, Washington, D.C. To put things in perspective look at these key yardsticks:

- **Freight's share of the GNP dollar:** A 7.5% portion is currently being allotted for freight—a figure that has tended to remain fairly constant in recent years despite a continuing shift to a service-oriented economy. On the other hand, this overall freight bite is somewhat under the 9% readings of the 1960s.
- **Mode-by-mode outlays:** At latest report, trucks were accounting for about 76% of total dollar billings—followed by rail (11%), waterways (6%), oil pipelines (3%), air (2%), and miscellaneous (2%). But air has been one of the fastest growing segments—recently accounting for close to $5 billion in billings.
- **Mode-by mode tonnages:** Trucks still show up in first place for intercity tonnage, but with only a 37% market share. Rails trail closely with 27.7% share.
- **Rates:** The study uses revenue-per-ton-mile as a proxy for rates. The aggregate increases over the three year period ending 1983 are as follows: rail (10%), LTL carriers (19%), TL carriers (5%), domestic air (2%), and barge (6%).

Data is also provided on passenger travel. Its share of the GNP is put at 12%. Most of this—10.2%—can be traced to autos. Air, the other major alternative, accounts for another 1.3%.

BUSINESS DATATRAK

CURRENT PRICES

It's still a no-inflation scenario

Ignore this month's small 0.4% increase in industrial producer prices. It looks to be nothing more than a temporary blip. Virtually all of the advance can be traced to energy. Subtract the big boost in gasoline and some other petroleum products and this bellwether index of inflation actually shows a fractional decline from last month.

The rise in energy prices can be considered a one-time correction because these prices fell too much during the past winter. There is really no upward pressure on basic oil prices. And all signs seem to be pointing to a return to energy stability by next month.

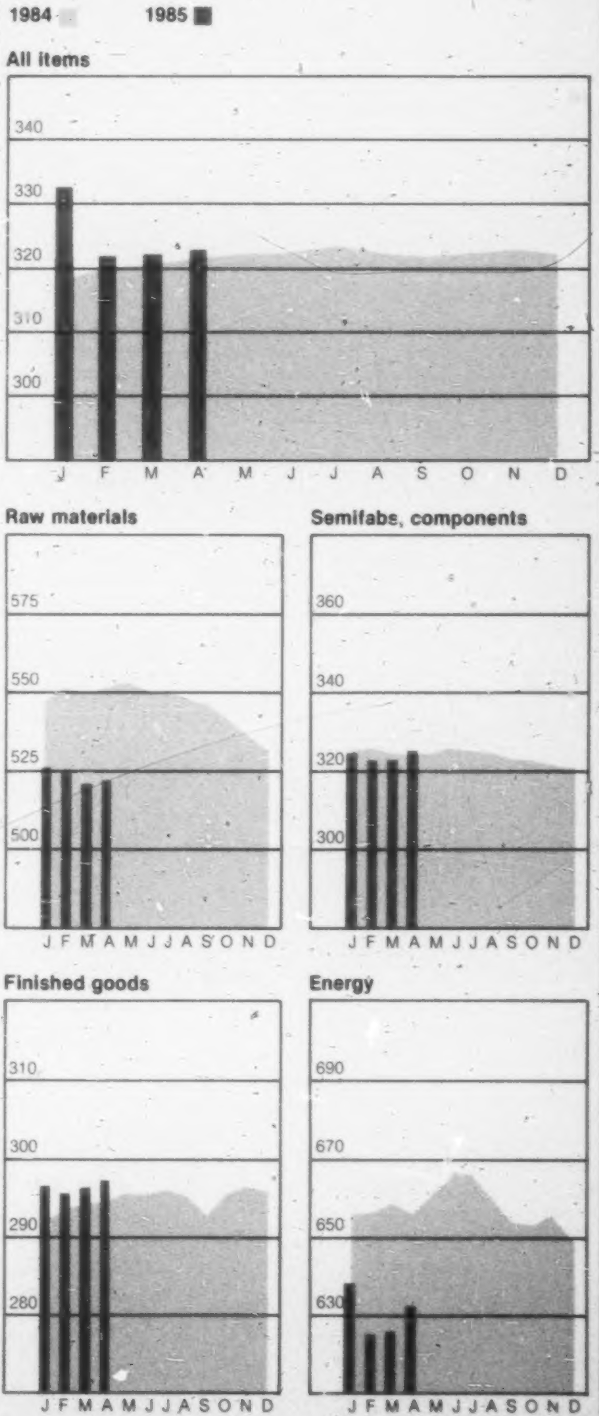
Even more important,

This month's breakdown

	Latest level (Apr.)	% change from: Month ago	Year ago
Bearings	347.1	−0.1	2.7
Bolts, nuts, etc	278.5	0.4	1.4
Chemicals, inorganic	299.5	−0.1	3.2
Chemicals, organic	351.5	−0.1	−5.5
Concrete products	316.9	0.6	2.6
Corrugated cartons	284.6	0.1	9.7
Cutting tools, small	285.4	−0.1	1.9
Electric lamps (bulbs)	338.7	−0.6	−2.8
Electronic components	198.7	0.1	4.4
Fans and blowers	358.8	0.4	4.9
Foundry and forge products	362.9	−0.3	0.9
Fuel oil (residual)	1087.9	−2.2	−1.7
Furniture, commercial	305.0	0.5	3.0
Gasoline	545.2	5.5	−4.6
Glass, flat	220.5	−0.3	−4.2
Glass containers	371.4	0.2	3.7
Gypsum products	317.8	−1.0	−10.0
Hand tools	374.8	0.9	5.2
Hand tools, power driven	231.1	−0.8	3.8
Industrial furnaces	384.1	0.1	2.9
Integrating and measuring instruments	233.4	1.3	2.5
Internal combustion engines	347.8	0.3	3.1
Lubricating oil	766.9	−0.4	−3.9
Lumber millwork	309.5	−0.1	0.7
Material handling equipment	293.9	0.0	2.2
Metal containers	358.0	0.1	3.7
Metal mill shapes (nonferrous)	316.2	1.4	−3.6
Metal tanks	305.8	0.0	0.1
Motors and generators	350.6	0.1	3.3
Motor trucks	296.1	0.0	4.8
Office and store equipment	154.9	0.7	0.3
Paperboard	284.0	−0.6	2.5
Paper boxes and shipping containers	275.7	−0.4	5.5
Paper office supplies	240.5	0.2	−1.7
Paint	280.4	0.3	4.4
Plastic resins	308.1	0.9	0.1
Precision measuring tools	264.0	0.9	4.2
Pumps and compressors	355.4	−0.1	1.5
Refractories	370.0	0.5	2.3
Rubber belts and belting	353.5	−0.1	2.0
Scales and balances	229.2	−0.2	−0.8
Steel products	364.8	0.1	1.1
Switchgear	276.7	−0.3	−0.1
Textiles, synthetic fibers	156.8	0.1	−2.4
Textiles, gray fabrics	151.8	−0.5	−0.8
Tires and tubes	239.1	−0.9	−1.8
Transformers and power regulators	232.6	−0.8	2.6
Welding equipment	286.1	−0.1	0.4
Wire and cable	203.4	0.1	−1.3

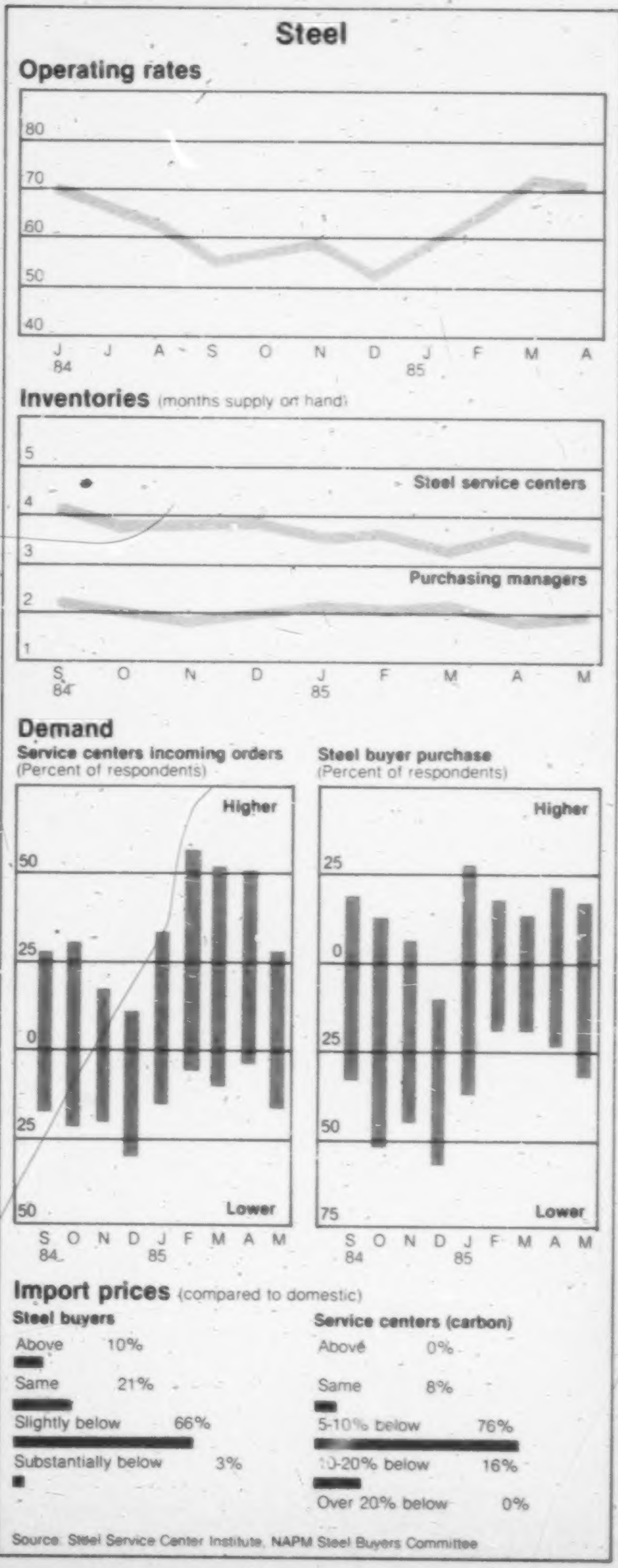
Industrial prices

(Index: 1967 = 100)



Source: Bureau of Labor Statistics

BUSINESS DATATRAK



Steel

Source: Steel Service Center Institute, NAPM Steel Buyers Committee

the lastest overall product price readings show that manufacturers are not under pressure to increase prices as a result of their material costs.

A close look at some materials seems to support a non-inflationary outlook. Over the past several months, price declines were noted in industrial chemicals, many secondary products, cement, flat glass, softwood lumber, gypsum products, paperboard, and textile grey goods.

Metals don't seem to be going anywhere either. Most non-ferrous lines, for example, haven't risen above their recent lows.

Even fabricated goods, which had begun to inch up over the past few months, took a breather over the last 30 days. This was due to offsetting moves as increases in office machines, instruments, and hand tools were balanced out by declines in transformers, machine tools, and switchgear.

Finally, overall year-to-year comparisons remain encouraging. Of the 50 or so product lines regularly monitored by *PW*, 26 are actually running under last spring's levels—hardly a harbinger of any significant upward pressure.

STEEL SCENE

Looks like a banner year for service centers

Near term steel demand may not be all that buoyant. So say the buyers who responded to the latest NAPM steel survey.

Only 17% of those queried expect to increase their receipts of the metal over the next three months—far fewer than the 31% who see reductions ahead. The 14% gap between optimists and pessimists is the largest since late last year.

Distributors responding to the latest Steel Service Center Institute (SSCI) survey are somewhat more bullish. But even here the findings aren't quite as impressive as they were last month. Right now the gap between those expecting increased shipments (28%) and those anticipating decreases (15%) is only 13%. This gap is far less than the 49% difference recorded last month.

Despite all this, steel service centers are still expecting a record year. Just-in-time delivery considerations funnel an increasing amount of overall business to these distributors. March figures showed the second highest shipping rate in some six years.

Nevertheless, the industry is far from complacent. Observes SSCI president Andrew G. Sharkey, "Not all of our members are participating equally—and the marketplace continues to be extremely competitive."

Sharkey and other industry executives continue to emphasize the fact that the long-term prognosis for service centers remains very rosy.

Here are some key findings of both the buyer and SSCI surveys for the shorter term:

BUSINESS DATATRAK

- **Inventories:** Totals are in pretty good shape. Tonnages and months' supply are holding to last month's levels.

Some 45% of the buyer respondents would like to pare inventories over the next two quarters, and not one single PM is considering increases. The service center picture is almost as impressive—50% are contemplating decreases, far outweighing the 7% who may add.

- **Suppliers:** Only a few widely scattered worries here (in structurals and hot rolled sheet for service centers).

Some 97% of the surveyed buyers see no supply problems over the next six months. And 92% of queried service center distributors agree.

- **Foreign competition:** Overseas bargains are still available despite the imposition of new tonnage quotas.

The service centers tend to agree. Specifically, price advantages are noted by more than 90% of the queried distributors.

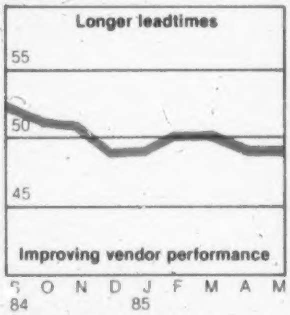
Buyers are also optimistic about holding on to this advantage. Over the next six months there are as many PMs who expect to increase their dependence on foreign steel as those who expect to cut back.

On the other hand, service centers part company with buyers on this point. Some 31% of them expect to reduce their dependency on foreign steel by summer or fall. This is far more than the 4% who predict increasing reliance ahead.

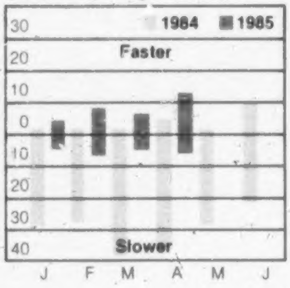
Monthly procurement status report

Leadtime index

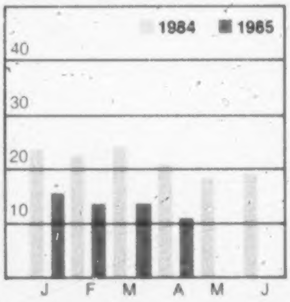
A "diffusion" index based on 158 key commodities. Avove "50" indicates a tendency for leadtimes to stretch out. Below "50" suggests improving vendor performance.



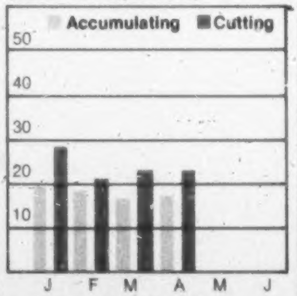
Delivery performance
(Percent reporting deliveries)



Forward commitments



Inventory strategy
(Percent of respondents)



Source: NAPM

PROCUREMENT STATUS

Buyers are calling the shots

Today's relatively easy markets are likely to persist through summer and into the fall.

It's hard to see otherwise, given the numerous encouraging buyer-oriented reports making the rounds these days. One of the most impressive is the NAPM Business Survey Committee study which suggests that delivery speedups now outnumber slowdowns by a margin of better than 2:1.

PMs responding to *Purchasing World*'s monthly procurement status survey tell much the same story. Indeed, several note that some vendors are even shipping ahead of specified delivery dates.

And if still more evidence of today's stable situation is needed, take a look at *PW*'s exclusive leadtime index—a compilation of more than 150 separate procurement items. At last report, this key buying yardstick was still under the neutral 50 mark.

The basic reason for this easiness is relatively flat demand at the factory level. As one PM puts it, "Industrial production has been on a virtual plateau for six months. And with new capacity coming on stream—particularly in areas like electronics—there's very little we have to worry about these days."

This could be one reason why inventories continue to shrink. Some 23% of queried buyers now say that they are cutting back on stocks—far more than the 17% who are adding.

Equally dramatic has been the drop in the number of buyers who are committing 90 days or more in advance for their production materials. Right now just 11% of queried PMs are covering their bets so far in advance.

Still another factor suggesting smooth sailing ahead: today's continuing price easiness. At latest report, 14% of the survey respondents were experiencing price declines—double the 7% being socked with boosts.

Leadtimes and availability

Chicago: The trend is toward shorter waits—with these reduced leads (in weeks): cold-rolled steel sheet (6-7), special brass sheet (1-5), special copper sheet (1½), special copper/brass rods (1-5), softwood framing (1-2), and electric coils (4-10). Moving out are PVC (6), and aluminized sheet (11).

Cleveland: Reductions predominate: 2-ply drums (on demand), cold-finish aluminum (10), softwood lumber (2-3), skids (2-3), plastic shrink film and strapping (on demand), and paper (6). Out somewhat are corrugated (3-4) and die cut paperboard circles (3-4).

Los Angeles: Some modest changes here. Extending are choice white greases (3), custom seals and gaskets (4-6), and custom storage tanks (10-12). Grey iron castings have come in a bit (to 5-6). Ditto brass castings (to 5-7). Other metals remain unchanged.

BUSINESS DATATRAK

Houston: Large scale transformers are out slightly (to 4-7 months). And some corrugated deliveries now take 3 rather than 2 weeks. Metals are generally stable in the 8-16 week range. And while there's little change elsewhere, weak prices suggest impending uneasiness in ethylene, linerboard, and component parts.

Philedelphia: A mixed pattern here. Coming in a bit (in weeks) are stainless steel flat-rolled strip (7-8) and carbon steel sheet from the mill (4). Out somewhat are corrugated cartons (3-4), chemicals for foam in place (1-2), and wooden pallets (1-2½). Fasteners are holding at stock to 4 weeks.

Pittsburgh: Little change here—with these typical weekly leads: corrugated and folding boxes (3-4), paper and plastic bags (4-6), all types of drums (1), waterproof paper (8), laminating paper (6-9), lumber (3-4), steel strapping (2-3), polyethylene (5), PVC (6), and alloying materials (2).

Leadtimes (in weeks)

	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	4	4½	9
C-R Sheet (Chgo)	6½	7	5
Plate (Phil)	3½	3½	10
Plate (Chgo)	2½	2½	2½
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	7	7	7
H-R Bars (Chgo)	3	3	3
Cold-Drawn Bars (Phil)	7	7	7
Galvanized (LA)	13	13	14
Galvanized (Chgo)	7	7	10
Structurals (Chgo)	4½	4½	4½
Structurals (Hous)	17	17	17
Tubing (Phil)	7	7	7
Grey-Iron-Castings (LA)	5½	6½	7½
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	6	6	5
Pipe, Carbon (Hous)	13	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	13	13	17
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	7	7	7
ICs (Linear) (Phil)	15	15	17
Motors (Phil)	13	13	15
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	10	10	10
Relays (Chgo)	15	15	15
Resistors (Chgo)	10	10	12
Resistors, Wirebound (Phil)	8	8	10
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	2	2	2
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	2½	3	3
Softwood (Phil)	⅛	⅛	⅛
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Napthalene (Chgo)	2	2	2
Paint (LA)	4	4	5
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	3	3	3½
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	3	3	3
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	6	6	2½
PVC Resin (Pgh)	6	6	6
Titanium Dioxide (LA)	1	1	1

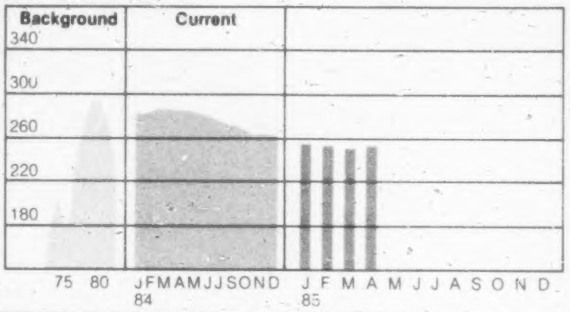
	Now	Month ago	Six months ago
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	3½	3	3
Cartons, Corrugated (Hous)	2	2	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	6	6	4
Shrink Film (Clev)	1	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	1	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	4	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	11	11	11
Aluminum Plate (Chgo)	12	12	14
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	11	11	11
Brass Castings (LA)	6	7	9
Brass Rods (Chgo)	2½	4½	6
Brass Sheet (Chgo)	2½	4½	7
Brass Tube (Chgo)	1½	4½	5
Copper Fittings (LA)	3½	3½	3½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	7	7	5½
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	2	2	4
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	5	5	5
Zinc (Pgh)	2	2	2
MISCELLANEOUS			
Bearings, Domestic (Phil)	22	22	22
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	50	50	50
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	1½	1½	1½
Fasteners (LA)	5	5	7
Fasteners, Std. (Phil)	2	2	4
Heat Exchangers, Carbon-alloy Steel (Hous)	21	21	20
Heat Exchangers, Hi-pressure (Hous)	31	31	35
Insulation Mat'l. (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	2½	2½	2½
Pumps (Hous)	30	30	35
Pumps (LA)	9	9	9
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	17	17	17
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Latest month	253.4
Month before	252.4
Year ago	288.6

(Index: 1967 = 100)



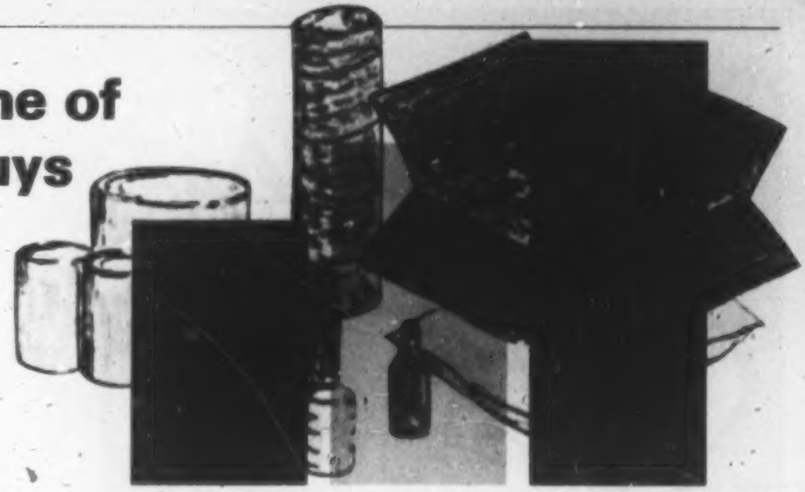
Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	347.00
Steel, structural shapes, Pitts., cwt	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt	25.10	25.10	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	23.95	23.95	17.50
Steel, bars, Pitts., cwt	23.95	23.95	17.50
Steel, bars, C.R., Pitts., cwt	29.25	29.25	26.00
Steel, plates, Pitts., cwt.	23.25	23.25	23.25
Steel, plates, H.R., Pitts., cwt	23.25	23.25	23.25
Steel, sheets, C.R., Detroit, cwt	27.10	27.10	27.10
Steel, strip, C.R., Chi., cwt	35.30	35.30	35.30
Steel, basic wire, Pitts., cwt	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.520	0.518	0.665
Antimony, in alloy, lb	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb	5.35	5.35	5.20
Brass, red, 85%, [sheet], lb	1.32	1.32	1.26
Brass, yellow, [sheet], lb	1.27	1.27	1.21
Cadmium, ton lots, lb	1.25	1.25	2.25
Copper, electrolytic, wire bars, refd., lb	0.69	0.69	0.71
Copper sheet, over 24 in., lb	1.41	1.41	1.35
Lead, common, N.Y., lb	0.200	0.200	0.250
Magnesium, pig ingot, [99.8%], lb	1.48	1.48	1.43
Mercury, 20 fl. lots, N.Y., fl	293.00	300.00	327.00
Molybdenum Climax Oxide/bags, lb	4.65	4.65	4.65
Nickel, electrolytic, producer, lb	3.20	3.20	3.20
Platinum, producer, oz	475.00	475.00	475.00
Silver, N.Y., oz	6.28	6.74	8.73
Tin, Straights, N.Y., lb	5.79	6.03	6.37
Zinc, Prime West, East St. Louis, lb	0.45	0.47	0.52
Zinc, die casting alloy, No. 3, lb	0.515	0.535	0.595
PAPER			
Uncoated book #3 offset, ton	850.00	850.00	810.00
Watermarked bond, ton	985.00	985.00	985.00
Gummed sealing tape, carton	16.25	16.25	15.45
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	495.00	495.00	475.00
Wrapping paper, std. distributor cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	320.00	320.00	320.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd	0.352	0.361	0.399
Cotton drill, 1.85, 59", 68x49, N.Y., yd	1.04	1.03	1.04
Cotton middling, 1", N.Y., lb	0.602	0.636	0.588
Printcloth, 48", 80x80, N.Y., spot, yd	0.63	0.65	0.80
Army duck, 37", 13 oz., yd	1.70	1.70	1.90
Blended printcloth, 64", 78x54, yd	0.70	0.73	0.75
20s combed yarns	1.95	1.95	2.16
Wool tops, N.Y., lb	3.60	3.60	3.60
CHEMICALS			
Acrylonitrile, tanks, lb	0.455	0.455	0.455
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	210.00
Benzene, petroleum, tanks, Houston, gal	1.51	1.45	1.48
Caustic soda, 76% solid, drums, carlots, cwt	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb	0.58	0.58	0.58
Formaldehyde, USP, 37% [12% to 15% meth.], tanks, lb	0.106	0.106	0.106
Glycerine, synthetic, tanks, lb	0.86	0.86	0.81
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.54	0.54	0.45
Naphthalene, crude, tanks, lb	0.22	0.22	0.22
Phthalic anhydride, tanks, lb	0.305	0.305	0.305
Polyethylene resin, low density liner film grade (market price), lb	0.280	0.280	0.415
Polypropylene, homopolymer grade (market price), lb	0.330	0.330	0.415
Polystyrene, general purpose grade (market price) lb	0.35	0.34	0.42
Shellac, bone dry, N.Y., lb	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb	0.26	0.26	0.35
Sulphur, crude, ex-terminal, Tampa, Fla., lt	157.50	157.50	140.00
Sulphuric acid, 66%, commercial, tanks, ton	56.85	56.85	56.85
Titanium dioxide, anatase, reg., carlots lb	0.69	0.69	0.69
Xylene tanks, gal	1.36	1.36	1.28
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	302.25	302.00	324.40
Lumber, 2x2, pine, mbf, cl	299.95	300.35	316.05
Plywood, plyform, ¾", msf, cl	566.95	570.20	571.95
Plywood, ⅝", msf, cl	367.85	372.10	366.80
Cement, bulk, ton, tl	64.76	64.76	62.04
Sand, ton, cl	6.24	6.21	6.15
Ready-mix concrete, 3,000 psi/cu.yd., 15 cu. yd.	47.64	47.39	45.86
Crushed stone, 1½", ton, cl	7.62	7.57	7.82
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.80	0.79	0.76
Gypsum sheathing, ½"x1"x8", msf, tl	207.94	206.44	219.26
Brick, common, per thousand, tl	180.28	179.89	174.08
Asphalt paving, AC-20	175.64	175.08	164.21
Concrete sewer pipe, 12", prem. joint, per foot, cl	7.24	7.22	6.95
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl	22.25	23.85	27.00
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	28.50	29.75	31.40
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.860	0.855	0.850
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.818	0.810	0.810
Heating oil, No. 2, Chi., bulk, gal.	0.775	0.765	0.825
Heating oil, No. 2, N.Y., bulk, gal	0.800	0.818	0.878
Heavy fuel, PS 400, Los Angeles, rack, bbl	26.50	26.50	26.25
Jet kerosene, gal	0.715	0.743	0.805
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.355	0.355	0.420
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	72.00	85.00	102.00
Steel, No. 1, hvy., dlvd., Chi., ton	67.00	79.00	84.00
Copper, No. 1, East, wholesale buy, dlvd., lb	0.570	0.575	0.600
Copper, No. 2, East, wholesale buy,	0.480	0.500	0.510
Brass, red, East, wholesale buy, dlvd., lb	0.530	0.535	0.560
Brass, yellow, East, wholesale buy, dlvd., lb	0.330	0.350	0.380
Alum., old sheet/cast, E., wholesale buy, dlvd., lb	0.290	0.325	0.475
Alum., mixed clip., E., wholesale buy, dlvd., lb	0.320	0.345	0.505
Zinc, old, East, wholesale buy, dlvd., lb	0.140	0.140	0.185
Lead, clean solids, East, wholesale buy, dlvd., lb	0.110	0.100	0.145
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	15.00	15.00	32.00
Paper, old corrug. box, dlr., N.Y., ton	10.00	10.00	29.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb	0.10	0.10	0.13
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb	0.26	0.28	0.32

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

Packaging is one of year's better buys

Robert S. Reichard, executive editor



Competitive pressures are beginning to build up in the $60 billion-plus U.S. packaging market.

Overall price averages may continue to inch up, but the increases will be more moderate and scattered than over the last 12 months. There will be plenty of opportunities for money-saving deals.

A softer market tone is already apparent in some industry sectors. A recent *PurchasingWorld* nationwide survey revealed buyers are noting easiness in linerboard and corrugated cartons. A few also report softness in folding boxes, paper bags, plastics, and glass.

An encouraging sign: Two out of three buyers surveyed said 1985 prices will fall behind last year's gains. And the average packaging price boost for all of this year is put at about 2%—half that of last year.

Equally significant, more than half the respondents said they hope to keep tags at or below levels at the beginning of the year. That's in sharp contrast to the 20% who were able to do so in 1984.

One reason for this optimistic projection could stem from the downward pressure on corrugated—a product that accounts for roughly 25% of the nation's overall packaging bill. Several buyers feel they can knock a few percentage points off corrugated averages before year end. If so, it would mean a major turnaround for a product that has been moving up at double-digit rates (see chart).

Buyers of plastic packaging also remain optimistic about holding the price line—citing lingering easiness in most basic resins. They would like to see a repeat of last year's performance, when 2% was knocked off the average plastic bottle quote.

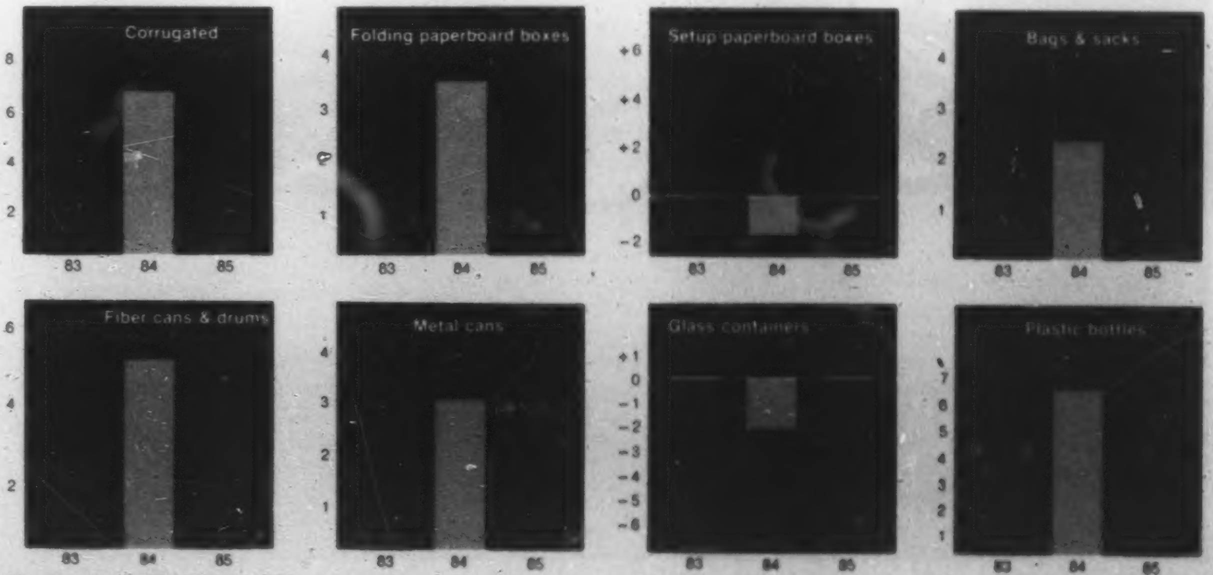
Metal can prices are not likely to move up much either, with both steel and aluminum prices failing to respond to the general business pickup.

Also adding to the hold-the-price stance of most buyers is the fact demand won't be growing as fast as it did last year, when packaging use grew a healthy 4.5%. A product-by-product rundown (see chart) shows that six out of eight monitored packaging modes will show smaller demand gains this year. In the other two modes some modest gain is anticipated because of a partial recouping of 1984 declines.

PMs responding to the *PW* survey talk of stepping up negotiating pressure by talking to more vendors, soliciting quotations at more frequent intervals, and asking for better deals in exchange for long-term commitments.

The trend toward substitution, innovation, and redesign also seems to be as strong as ever, with the majority of queried PMs suggesting that some changes are either underway or in the talking stage. For ex-

A detailed look at demand



Source: Commerce Department, PW Estimates ample, one buyer tells of saving 4% overall by working with his supplier on design changes.

Some also cite using value analysis to effect savings. These studies point to thinner gauge materials, downsizing overall packaging, or shifts to cheaper materials.

The fight among various materials is also getting hotter. Plastics are continuing to make inroads against glass in the bottle market. Synthetic materials have also shown some substantial advances in the bag market against paper. Conservative estimates place plastic penetration into the bag market at 12-13%.

The steel-aluminum battle is still hot. Reynolds, for example, is actively pursuing the steel food can market by offering an aluminum food can and a flexible pouch made of aluminum foil and plastic film.

Take a more detailed look at the current and projected market patterns:

- **Corrugated cartons:** The big news is the price erosion occasioned by discounting in linerboard where transaction prices have dropped to as low as $290/ton—some $60 off the official list of $350/ton. Add to this shakiness a modest deceleration in demand, with 1985 to-date shipments running only fractionally ahead of last year's levels. This demand level isn't likely to pick up for now. The industry will be lucky to ship 280 billion square feet—only 3.5% above 1984—a far cry from last year's 6.7% increase.
- **Other paperboard packaging:** Several different product lines are involved here—though together they make up less than 40% of total paperboard packaging (some 61% is corrugated). In descending order of importance they are folding boxes (18%), sanitary food containers (12%), fiber cans (7%), and setup boxes (2%).

All signs point to about a 2% demand increase in folding boxes through 1985—well under last year's 3.5% advance. Behind the slowdown is less buoyant economic activity which means moderation in demand for packaged nondurables.

The fiber and drum growth rate could also fall off a bit (from 5% down to 4%). But sanitary food container gains should hold.

- **Bags:** A 2% increase in combined paper and non-paper types is projected for 1985—just fractionally under last year's 2.3% estimated advance. Plastic types will again be the best performers. But paper is fighting back emphasizing its products are biodegradable and speed up checkout lines in the supermarket.

It's a big market—some $500 million is spent for an estimated 27 billion grocery bags each year—and a percentage point or two fluctuation can make a big difference in vendor earnings.

- **Cans:** Little more than a 1% increase in demand is expected for 1985—well under the 3.5% and 3% increases of 1983 and 1984. Reason: some slowdown in buying by the canned food and beer markets, plus increased competition from glass and plastic bottles. Through the end of the decade, only 1-2% annual increases are seen.

But aluminum cans, which already account for two-thirds of the total metal can market, will continue to pick up market share. This year, aluminum can manufacturers expect production to approach 67 billion units—up five billion from 1984.

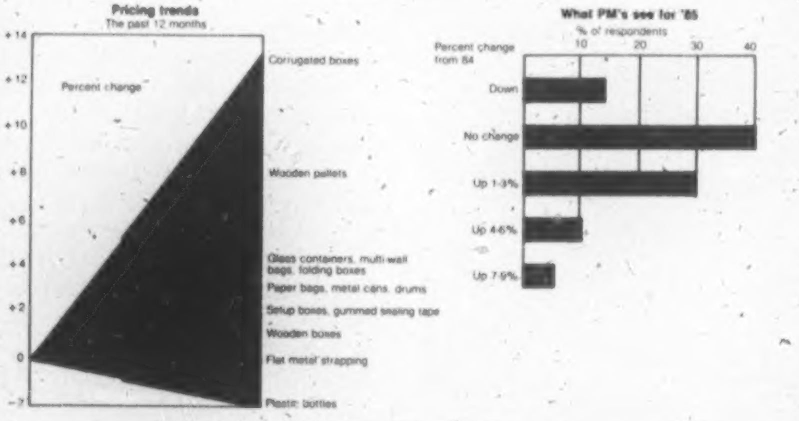
Development of the resealable aluminum can will certainly help. As the metal moves more deeply into the food sector, long term overall gains in aluminum could settle in the 3-5% range.

- **Plastic bottles:** This remains one of the faster growing packaging sectors, with a 6% gain projected for the current year, on top of 1984's 6.6% advance. Biggest gains are still in the soft drink market where last year plastics soaked up 22.6% of total gallonage.

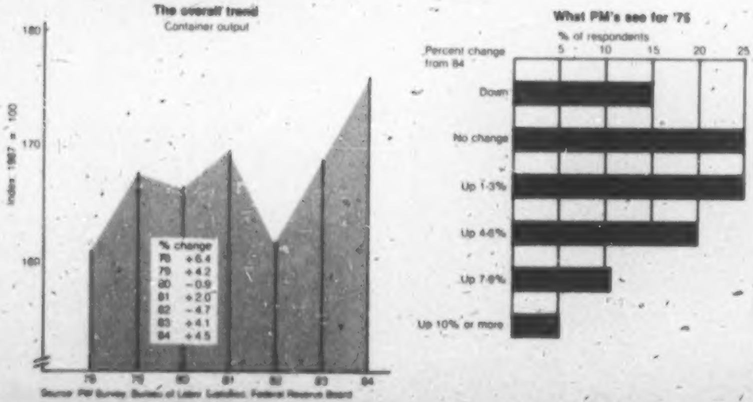
The uptrend is expected to continue with improvements in gas barriers and carbonation retention expected to add 5-6% annual gains over the next five years.

If you add in flexible packaging, plus the introduction of plastic cans

How packaging markets shape up



The demand outlook



Source: PW Survey, Bureau of Labor Statistics, Federal Reserve Board (now in the development stage), these synthetics could well account for 50% of the primary food packaging business within 15 years.

- **Glass containers:** The traditional packaging material has been feeling the impact of PET beverage bottles. Not surprising, demand has been falling four consecutive years—off a hefty 13% from 1980.

But the industry isn't ready to throw in the towel. Lowered capacity, improved production methods, and more competitive pricing patterns suggest that markets may stabilize or even move up a bit. Demand for 1985 could climb by 1%, with similar advances possible through the remainder of the 1980s.

PW

Packaging takes on new high tech forms

When your company is a $3 billion packaging giant employing more than 25,000 people worldwide with an excellent reputation for productivity, efficiency, and quality, how do you become more concerned with customer-oriented marketing efforts?

James A. Lorincz, editor-in-chief

For Continental Can Co. Inc. of Stamford, CT, one answer was to replace its traditional orientation along product lines with an organization along market segment lines.

"What we are really saying to the packaging buyer is that we can supply a packaging solution to his problems from the many different packaging materials, container types and systems, and technologies that Continental Can offers," Richard Hofmann, executive vice president and operating officer for Continental Can, tells *Purchasing World*. Continental is creating what Mr. Hofmann calls a "materials indifferent" approach to managing the dynamics of package substitution.

And, of course, substitution continues to be the major force in the packaging selection process. If a new technology or package threatens to displace a particular product line, another Continental Can Co. division serving the same market segment can most likely substitute a new package for the old.

BROOKS
Catsup

Photo courtesy of Continental Can Co.

LAMICON™ plastic barrier bottles designed for regional and private label brands are six layer bottles which can be extrusion blow molded at four of Continental Can's 14 bottle plants.

Photo courtesy of Continental Can Co.

CIRCA Inc., Continental Can's new graphic services business, will offer packagers a fully integrated computerized system of services, ranging from conceptual design to color separations and press plates. Using computer imaging technology, designers can create or modify packaging designs in a matter of minutes or hours, instead of days and weeks for conventional photomechanical reproduction process.

Continental Can divisions, which really are businesses ranging in size from $100 million to $700 million in sales, have the breadth to accomplish even the most daunting packaging changes. A good example of this was the development of the plastic motor oil container for Quaker State, a shift that was one of the largest packaging changes ever made.

Continental coordinated all aspects of the conversion, including the creation of a proprietary package and the design of a complete turnkey renovation of Quaker State's filling plant in Vicksburg, MS. This required expertise in consumer research, extrusion blow molding, and filling and conveying line construction. In addition, Continental retrained the entire work force through a formalized program in which all line maintenance personnel and machine tender/operators were taught to operate its new equipment.

High tech packaging

Under its new market oriented approach, Continental is able to draw on its impressive array of new technologically advanced packaging developments.

Featured on our cover is its new CIRCA computer-aided design facility and capability. The equipment installed in CIRCA's new facility in Bedford, MA consists primarily of a Scitex Response 350 system for electronic design, layout, color correction, image creation, and color separated film production.

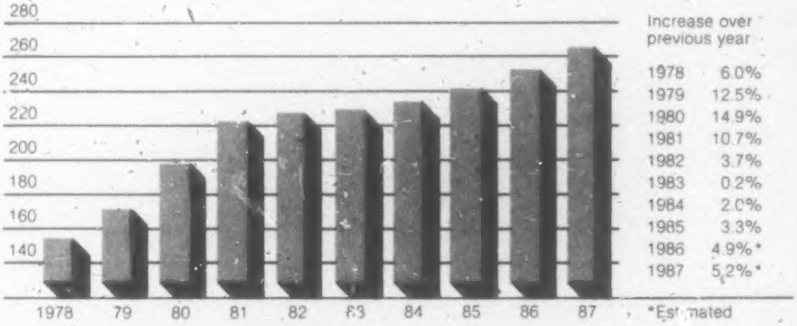
The ability of the CIRCA system to produce and modify packaging designs quickly has far-reaching marketing implications, says Mr. Hofmann.

"Users will be able to target pack-

The kind of year(s) a shipper can live with

PurchasingWorld freight rate index

(1972 = 100)



Increase over previous year	
1978	6.0%
1979	12.5%
1980	14.9%
1981	10.7%
1982	3.7%
1983	0.2%
1984	2.0%
1985	3.3%
1986	4.9%*
1987	5.2%*

*Estimated

It's still a buyers market in freight services. Right now, all signs point to about a 3.3% overall rate hike this year—slightly above the 2% increase of 1984.

Equally significant, 1986 is also beginning to look like a year shippers can live with. Wharton Econometrics (the big consulting firm that prepares these exclusive quarterly reports for *PW* readers) now sees only a 4.9% overall freight rate increase for that year—a modest downgrading of the 5.2% advance anticipated just three months ago.

Wharton analysts attribute the continuing good news to a combination of factors—including (1) ample or more-than-ample capacity, (2) less-than-sensational jumps in traffic, and (3) expectations of a still-strong dollar.

On the latter score, Wharton feels that dollar declines won't be strong enough to set inflationary pressures in motion—pressures that would substantially boost the material and labor inputs of most carriers.

The optimism doesn't stop after 1986 either. Wharton's extended forecast sees overall freight rates for 1987 rising only about 5.2%.

And what is true for overall freight holds for each of the major modes. Detailed trends are shaping up along these lines:

- **Rail:** The pace of growth in both freight carried and prices should slow in 1985. Cumulative rail ton-miles for the first quarter of the year, for, example were down 4.7% from a year earlier. Even piggyback traffic fell behind the earlier pace.

True, the year as a whole should be somewhat better—and ton-miles again end up in the plus column. But gains won't be nearly enough to permit major rate hikes. All in all, tariff increases should be quite moderate, averaging 3-4% quarterly (seasonally adjusted annual rate), and 4.5% for the year as a whole. Rate hikes in 1986 should average in the same range.

- **Truck:** Traffic is still running ahead of its year-earlier pace but not by the margins of last year. Less-than-truckload tonnage is still outpacing truckload activity, reflecting the smaller batches shipped with the growing popularity of just-in-time inventory management.

As for rate increases, some bureaus have already posted 2-6% boosts. But these should be watered down as contract and volume deals continue to proliferate. In any event, look for only a 3.7% boost for the year as a whole—not that much above last year's 2.7% advance. In 1986 and 1987, however, haulers will get more of the increases they have been waiting for, and price advances will move into the 5% range.

- **Air:** Demand grew 4.6% in 1984 while prices jumped 6.7% as carriers tried to recoup their losses from the previous year. But both demand and price gains should slow down in 1985—as the pace of overall economic activity moderates and input prices hold steady.

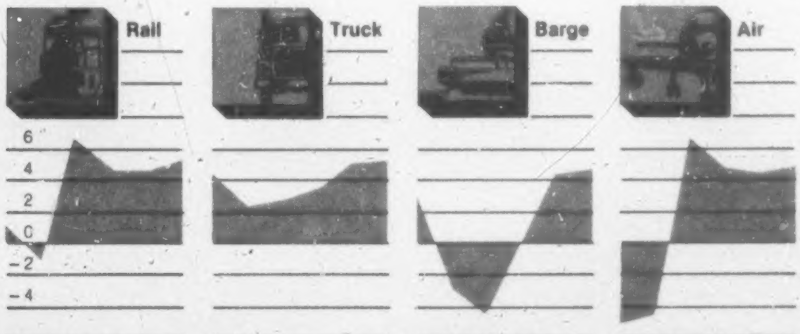
The slowdown is already apparent on the demand front where first quarter air freight declined 7.9% *vis a vis* a year earlier. Some gains are expected but they will be modest—in the range of 4.8% for overall 1985. Even smaller increases of 4.3-4.5% are likely for 1986 and 1987.

- **Barge:** Shipping growth has lagged behind all other freight services. Factors such as continued overcapacity and cutthroat inter-industry competition help explain why rates fell an average of 4.2% last year.

No dramatic turnaround is anticipated for 1985. Current trends suggest only about a 1.8% increase in traffic—probably sufficent to stabilize rates, but not nearly enough to allow any significant increases. On the other hand, some rate acceleration is probable in 1986 and 1987 when tags are expected to move up about 4.5% annually.

Freight cost outlook by mode

(Percent increase over previous year)



Source: Wharton Econometric Forecasts

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Purchasing World

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Midyear economic report:

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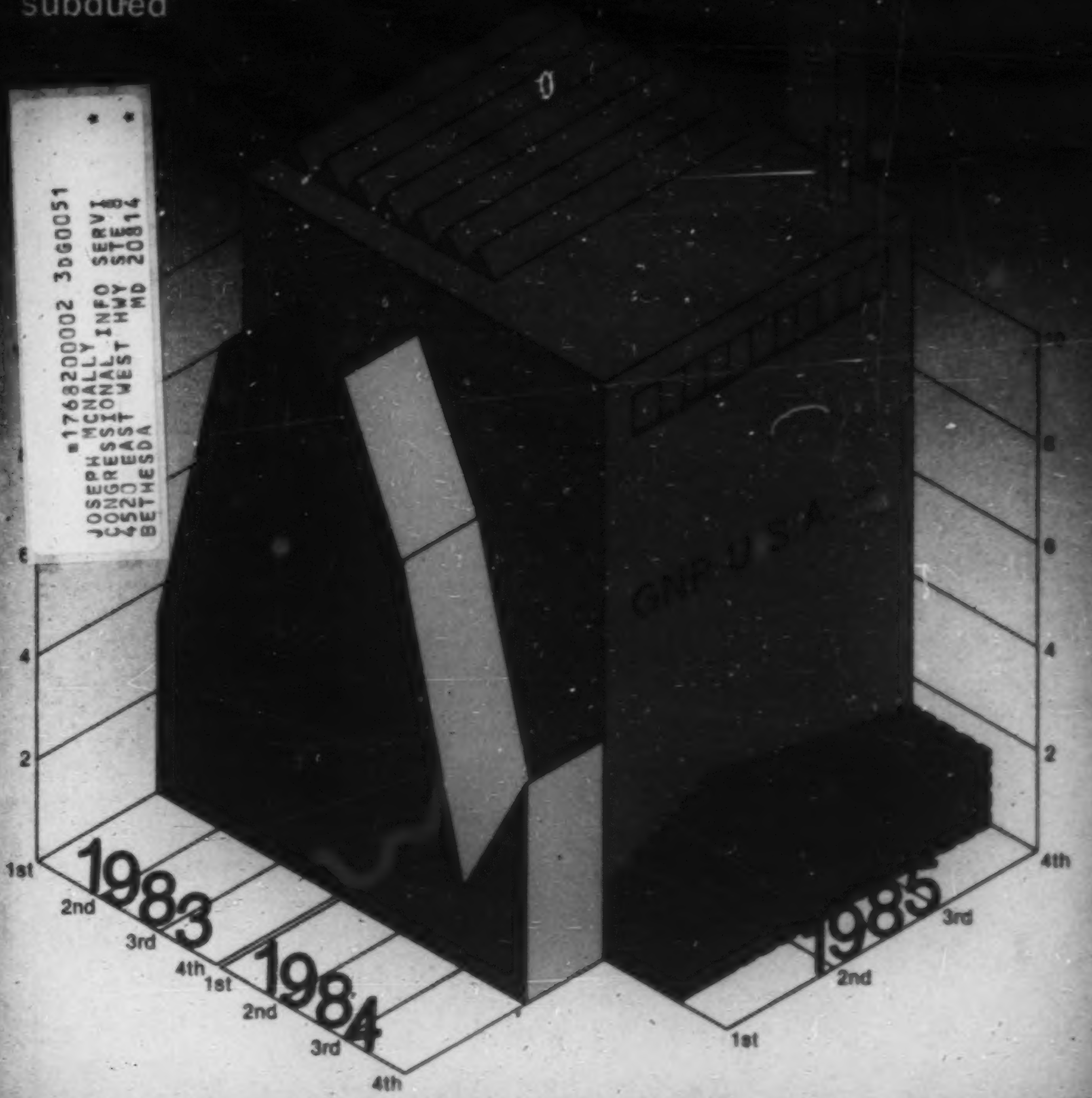

PurchasingWorld.

Helping you manage the business of buying

Vol. 29 No. 7-July 1985

Special report: MIDYEAR ECONOMIC REPORT

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PW's veteran economic forecaster, Dr. Louis J. Paradiso, sees slower growth ahead with the possibility of a minor recession in the offing—putting him at odds with some other forecasters.

38 **Concern clouds PMs' positive outlook**
Latest NAPM and *PW* surveys reveal a good outlook glossing over some surfacing PM concerns.

40 **Prices to remain in check**
The strong dollar, weak energy prices, and unemployment should hold prices relatively stable over the next three years, according to a latest Data Resources Inc. quarterly price rundown.

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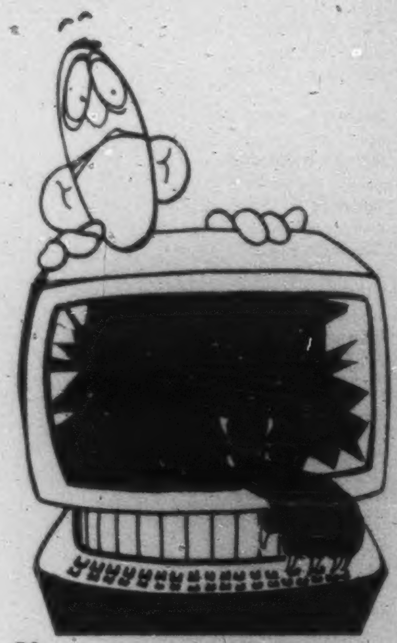
Key economic trends indicate only a modest growth curve, but executives remain optimistic in a recent McGraw-Hill survey.

45 **Models present bullish view of economy**
Four independent econometric models converge on an encouraging note with GNP gains expected in the 3% range for all of 1985 and 1986 looking even better than earlier estimates with a 2.6% projected gain.



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Crystal Ball
Contest

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PW PREDICTS

Robert S. Reichard, executive editor

It's nearly unanimous: buying will be inflation-free

Count on another year of relatively inflation-free buying. That's the unanimous opinion of those queried for *PW*'s midyear look at the economy. That's not to say that there may not be some fractional acceleration from today's near-level trends. But it is a pretty amazing performance considering that the current business upturn is already more than two years old.

Here's what *PW* contributors see ahead:

- *Dr. Louis Paradiso*. *PW*'s economic consultant is forecasting 5.5-6% GNP price increases from now through mid-1986. And in the producer finished goods category (which is more closely aligned to the industrial purchasing manager's purchase mix), Paradiso anticipates even more modest advances—ranging from 2% in the upcoming third quarter to only about 3.6% by mid-1986.

- *Purchasing managers*. Two independent surveys tell the story here. *PW*'s survey suggests that industrial procurement prices will rise only about 3% for all of 1985, with many buyers downgrading estimates that were made earlier this year. An NAPM survey is put in qualitative rather than quantitative terms. Some 52% of queried purchasing executives now expect to keep tags at or under current levels over the next six months.
- *Top management*. Corporate bigwigs are budgeting for only a 2.8% increase in the price of goods they manufacture. And, not one of the 15 subgroups analyzed is projected to advance in excess of 4.2%.
- *Econometric models*. A special *PW* analysis of four of the leading models points to average GNP price advances for 1985 and 1986 on the order of 3.9% and 4%. In the producer finished goods sector, the comparable increases are put at only 1.3% and 3.2%.

Last but not least, cost-of-living forecasts contained in *PW*'s mid-year analysis are equally rosy. Thus the econometric model rundown referred to above points to only 3.5-4% increases through the end of next year. True, Dr. Paradiso isn't quite as optimistic. He sees about a 5% rate by mid-1986. But even this is quite low relative to the averages of the recent past.

The basically non-inflationary scenario is not limited to the U.S. One recent OECD forecast sees 1985 price hikes averaging out at or under 1984 levels. The specific rates of advance projected: U.S.—3.25%, Japan—2.25%, West Germany—2.25%, France—6%, Britain—5.25%, Italy—8.25%, and Canada—3.25%.

If nothing else, these relatively subdued overseas advances should permit foreign producers to hold the price line on sales to U.S. buyers, even if the dollar does tend to weaken a bit.

Energy price trends

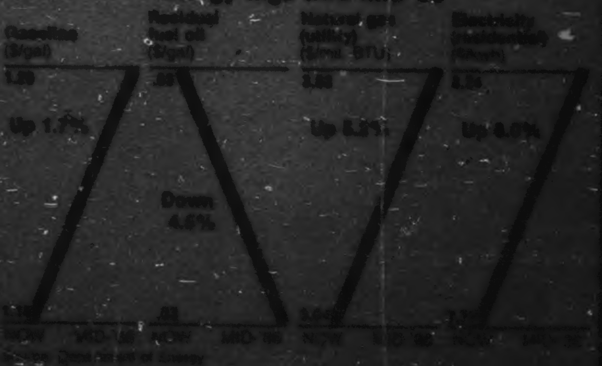
The near-term energy outlook should present no problems.

Department of Energy analysts, in making this rosy forecast, base it on the assumptions that petroleum demand both here and abroad will show little change and that crude oil tags will remain soft. DOE puts the average quote for imported crude this year at only $27.90/bbl, off some 3.4% from 1984 levels.

Assuming this figure is correct—and there's little to suggest otherwise as oil stocks begin to build up again—here's a more detailed rundown on how some of the key energy sectors seem to be shaping up:

- *Gasoline:* Some edging up may be in the cards, primarily because of EPA's ruling to reduce the lead content of the fuel. Other things being equal, this will add about 2¢/gal onto the average price when more stringent requirements go into effect in 1986. Even so, the increase over the next 12 months will come to only a modest 1.7% (see chart).
- *Residual fuel oil:* With the ending of the British coal strike (a work stoppage that drove the price of substitutable residual fuel oil up on international markets), DOE looks for a 3¢/gal average drop for 1985. And continued declines are projected for the first half of next year.
- *Natural gas:* Although there have been some isolated upward price adjustments, average wellhead prices are expected to remain stable. Nevertheless, end-use prices of the clean-burning fuel are projected to rise at the general rate of inflation of 5% over the next 12 months.
- *Electricity:* The residential rate is projected to increase by only about 2% from 1984 to 1985. However, the cost of the plants added to the system in 1985 is expected to have a stronger upward pull on prices in the first half of next year.

Energy tags thru mid-'86



Source: Department of Energy

PW PREDICTS

Chemicals

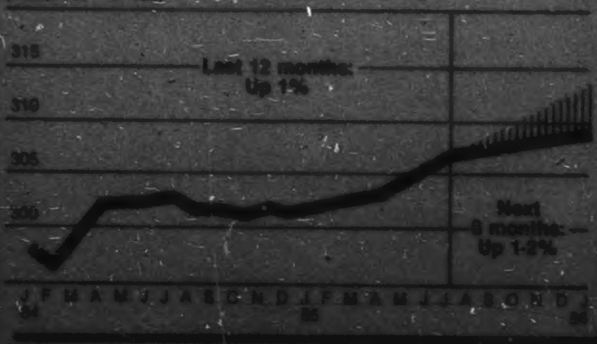
CURRENT SITUATION: Production gains have leveled off, with year-to-date totals running only about 1% above last year. And latest price averages are only 2% above a year-ago. Petrochemicals and plastics have been especially soft. Propylene and styrene monomers are both off about 2¢/lb. A few exceptions like benzene and chlorine are up. It is much the same in plastic resins where discounts remain.

DEMAND: Modest acceleration is likely in the coming months as inventories shrink and consumption picks up. Expect about 2-3% annual rate of growth over the next six months, though the year should be up only about 2% over 1984. Plastic resins should do somewhat better, with gains put at 3-4%. Problems in the farm industry point to a 1-2% drop in demand for agricultural chemicals. 1986 looks like a carbon copy of 1985. And the industry is expected to do little more than keep up with the GNP (about 3% each year) for the rest of the decade.

SUPPLY: Today's buyer's market will continue, with the industry operating at only around 72% of potential. Little near-term change is anticipated as the year's 2% demand gain is offset by an increase in overall production potential. Operating rates could decline in 1986 if estimates of a 5% capacity increase are correct. This is very nearly the case in most key sectors.

PRICE OUTLOOK: Expect most of the announced price increases to be watered down or withdrawn. Reasons: continuing oversupply, disappointing demand gains, overseas competition, and renewed downward pressure on petrochemicals. Producers are projecting only 3% increase for the year. Econometric models agree: DRI sees only 2.2% increase in industrial chemicals over the next year. Wharton projects a 1.6% gain this year and 3% in 1986.

Chemicals & products
(Index: 1967 = 100)



Typewriters

The latest generation of electronic portables is worth looking into. Models are available for as low as $279. Some contain a spelling check feature that can flag errors in up to 50,000 words. Sign of the times: Electronic portables are increasing at a 10% annual rate—four times the pace of recent years. Bigger electronic models should also do well. IBM has introduced models that sell for under $800. 1985 looks like it will be a good year for electronic typewriters—as many as 1.1 million units may clear the market this year.

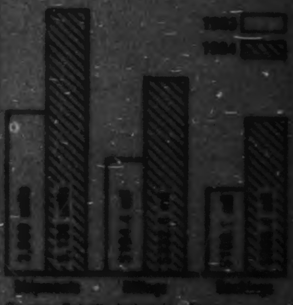
Electronic components

The sagging demand picture is having a sharp downward impact on prices. Some of today's bargain-basement quotes: (1) CMOS static RAMs now fetch only $3-4—a far cry from the $7-10 levels prevailing at the beginning of the year; (2) 256K EPROMs go for less than half the $20+ levels of just six months ago; and (3) 256K D-RAMS are available for just $4—down from $8 at the beginning of the year. Elsewhere, more price erosion is expected in both connectors and relays.

Robots

Demand is still soaring—sales this year are expected to climb to near $495 million—up nearly 50% from last year, which in turn was a hefty 71% above 1983 levels. But because of competition, unit prices continue to be relatively stable. Machines are averaging in the $60,000 to 65,000 range. According to a new Robotics Industries Association tabulation, there were 14,500 robots in operation in the U.S. at the beginning of the year—up from only 9,400 a year earlier. Almost all of these were designed to perform industrial tasks such as painting, welding, and materials handling.

Robotic demand



Source: Robotic Industries Assoc.

Steel

Prices remain weak after falling 2-3% in the first quarter. Further declines are possible for some big buyers who try to emulate GM who has reportedly been able to shave 1-3% off flat-rolled products for the 1986 model year. Smaller users may have to pay a bit more by the end of the year—as import quotas finally begin to have some impact. Even so, the best the industry can hope for is a recoup-

PW PREDICTS

Paper

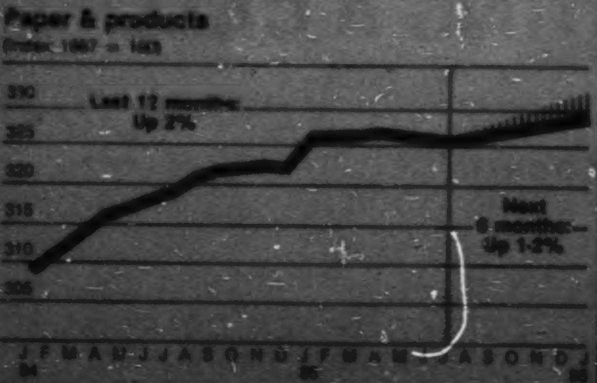
CURRENT SITUATION: Markets are subdued. Corrugated carton shipments are under year-ago levels. Another bearish factor is the strong dollar cutting the industry's export markets. **Quotes are soft. Linerboard is said to be going for $290/ton or less**—far under the official $350/ton list. Corrugated carton has also slipped. A modest newsprint boost has failed to hold and market pulp continues to be discounted.

DEMAND: Count on some second half pickup, with production likely to be up about 3% (to about 71 million tons). Consumption could be up a bit more because of a modest increase in imports. 1985 increases look to be shaping up as follows: uncoated groundwood—5.5%, uncoated free sheet—5%, coated papers—3.5%, unbleached kraft linerboard—3.5%, and unbleached kraft paper—4%. **Modest overall gains may continue longer-term.**

SUPPLY: No problems anticipated—operating rates in all major grades are under year-ago levels and high inventories provide added insurance. And the situation is not likely to change as modest amounts of new capacity are added—about 1.3% more this year, 1.7% in 1986, and 1.8% in 1987. Expect operating rates in uncoated free sheet to drop near 90% over the next few years, with an actual decline in solid bleached sulphate board. **Even coated groundwood supplies should be self-sufficient by 1987.**

PRICE OUTLOOK: Increases should be modest given the above supply-demand outlook. Some firming is expected in uncoated white papers by year end, with producers already testing the water with new boosts. Linerboard recovery seems certain—though it probably won't reach last year's $350/ton level by the end of the year. A survey of producers also suggests restraint—only a 3.8% boost is seen for 1985.

Paper & products
(Index 1967 = 100)



ing of first quarter declines—bringing 1985 averages up to 1984 levels. By early next year, another 2-3% boost is possible—just enough to put the big domestic mills back into the black again.

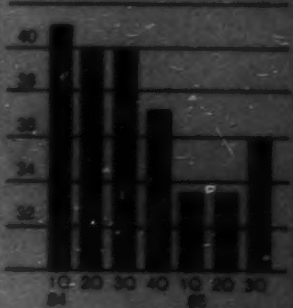
Copper

Things are improving—worldwide stocks of refined metal are down 650,000 mt over the last year-and-a-half. But prices continue to be soft because of the normal summer slowdown—they should stay in the 65-70¢/lb range. After the summer, recovery will be limited by modest 1985 demand gains (only about 2% here in the U.S.). The result is that the price will only be in the mid-70¢/lb range by year-end. There is a chance for tags to rise to 80¢/lb by mid-1986, but that should be the ceiling—such a level is almost sure to reactivate as much as 800,000 mt of currently shut-down capacity.

Polypropylene

After prolonged weakness, prices are finally beginning to show signs of firming. 2-3¢/lb increases have just been posted for homopolymers—with an even bigger 5¢/lb boost scheduled for copolymers. The increase brings the going asking price for general purpose homopolymer into the 35-37¢/lb range. This increase is given a good chance of sticking on a combination of reduced inventories, a high 90% operating rate, and good demand (up 9% so far this year). The long-term prognosis is also good—a big 40% demand jump is expected over the 1985-1990 period.

Polypropylene
(Transaction price—¢/lb.)



Trucks

Import competition is beginning to put downward pressure on larger-size models, especially dump trucks, garbage trucks, and medium duty types that make short, intercity hauls. Foreign makers already have close to 6% of this market and are aiming for a 15% share by the end of the decade. The result is bigger discounts for buyers (generally in the 10-20% range) even though these big trucks are selling at a 290,000 annual rate—the highest level in seven years.

Lead

The end of the big strike threats is putting the heavy metal under pressure. It means a 10% gain in Free-World mine production this year—more than offsetting last year's 4% decline. This produc-

PW PREDICTS

Semiconductors

The once-booming semiconductor industry is taking its lumps these days with global sales now expected to be off about 3-5% this year.

That doesn't tell the whole story. Zero in on the U.S. and an even more bearish picture emerges. The Semiconductor Industry Association (SIA), for example, puts this year's domestic slippage at near 14%.

Behind the downturn: high inventories resulting from last year's hedge buying against shortages, plus the domestic slowdown in personal computer demand. On the latter score, PC sales are expected to advance less than 20% this year, a far cry from the 50% average gain over the previous three years.

Another factor behind the U.S. slide is overseas competition. Foreign producers are grabbing a bigger portion of the world market. This year, for instance, SIA figures suggest that the American share of the overall global market will come to only 40.4%, down significantly from the 44.7% reading of last year.

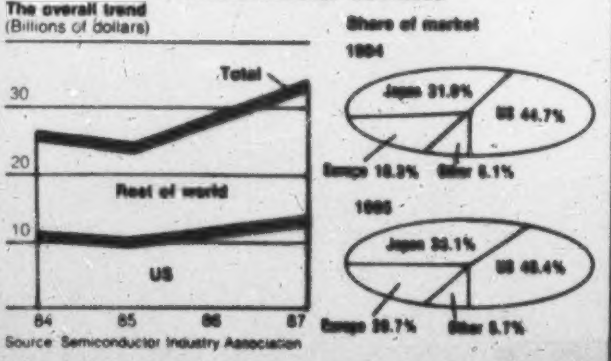
Moreover, the U.S. decline is likely to be across-the-board. In-Stat (a major electronics research firm), for example, sees both domestic ICs and discreet devices off by about the same amount in 1985.

All this, in turn, is having a sharp downward inpact on prices. One source estimates that 1985 quotes could be off as much as 8-10%. And In-Stat suggests an even more precipitous drop on the order of 11.5% per unit.

Next year's tags could also be soft as excess capacity continues to overhang the market, especially in 64K and 256K memories. On the other hand, 1986 physical demand should begin to turn up again. SIA puts U.S. producer dollar sales back at last year's $11.5 billion level.

And by 1987, SIA sees a big 20% domestic advance. But because overseas producers are also expected to move up sharply at that time, the U.S. share will probably remain under the 41% level.

Semiconductor demand



Source: Semiconductor Industry Association

tion level is far too high at a time when disappointing demand from the battery and gasoline markets is limiting consumption gains. In short, there is little to suggest near-term market strength. In fact, a further price decline is possible in the weeks ahead. On the other hand, the start of the battery season in late summer could cause a modest rally at that time—but only into the relatively low 20-22¢/lb range.

Stainless steel

Mill attempts to pare discounts on regular plate seem to have been successful—with only 24% off list available on Type 304 metal (vs. 28% previously). But only about half the discount reduction on sheet has held up—few sellers are able to limit price shading to the announced 25% level. In the meantime, stainless bar tags remain stable despite good demand—as one major producer pushes to increase its market share.

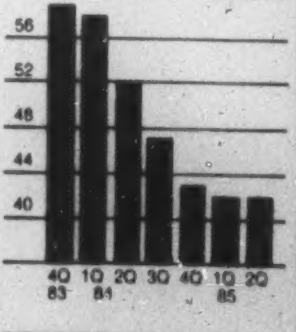
Aluminum

Weakness persists. Merchant ingot, for example, now moves at only 50¢/lb, and some producers are now also selling in this range. Tags on primary alloyed ingot are also shaky. Extrusion grades are down into the 60¢/lb range—far under the official 90¢/lb list. And National Aluminum's new policy which links product prices to free-market ingot clearly indicates that lists are now meaningless. Nevertheless, some modest recovery is seen by fall—as (1) global stocks come down a bit more, and (2) U.S. production cutbacks drop domestic output to near the 70% level. Best price bet: Tags should inch up to the upper 50¢ range by late 1985 and perhaps into the low 60¢area by early 1986.

Rubber

Look for continued softness in natural rubber quotes. Prices are now put at around 42¢/lb—off a hefty 28% from the highs of early 1984. And they could well edge lower (into the upper 30¢ range) by the end of the year as production continues to increase, demand levels off, and synthetic types become increasingly attractive alternatives.

Natural rubber
(N.Y.—¢/lb.)



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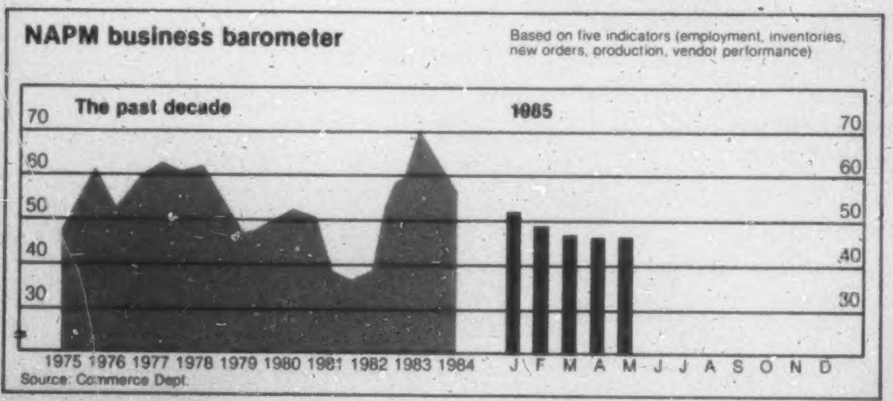
BUSINESS DATATRAK



Source: Commerce Dept.

KEY ECONOMIC TRENDS

Fed loosens up and market brightens

Expect another few quarters of continued growth, albeit at a relatively modest pace.

The key reason is the Fed's decision to continue its expansive monetary policies. Witness, for example, the recent cut in the discount rate followed by reductions in both business and consumer borrowing charges.

All things being equal, this should boost both near-term investment and consumer buying, thus keeping second half GNP figures in the plus column.

Other positive forces would have to include (1) relatively low stock-sales ratio, (2) a federal deficit which will top $200 billion this year, (3) continued increases in military spending, and (4) a still-booming construction market.

The latter is being aided by builders of rental units who are rushing to take advantage of favorable financing opportunities that could be eliminated by impending tax reform. Contract awards in March and April constituted the highest two-month total on record.

Even capital investment is looking fairly good at this point. During the last three-month period, for instance, plant and equipment appropriations (a lead indicator of actual spending) rose another 5% (see chart). And for the year as a whole, a 17% increase over 1984 is currently anticipated.

Some of these big appropriations could be cancelled or pushed forward. But any advance of this size, coupled with all-time high backlogs of unspent appropriations, does suggest that capital spending will remain positive for at least the rest of this year.

The current declines in interest rates seem to be coming just in time—at least as far as consumer spending is concerned. Reason: Families have been showing signs of holding back spending over the past few months. The Conference Board's "Buying Plans Index" dropped to 86.1 in May (see chart), the lowest level in more than a year.

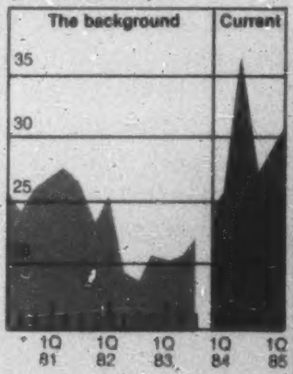
Car sales, for example, are slipping, as only 7.2% of queried consumers said they were planning purchases of new cars over the next six months. And a similar trend has dropped plans for buying major appliances from 25.9% to 22.3%.

But, as suggested, lower interest rates should start turning things around, possibly by as early as August or September, and such purchases should then remain on a high plateau through the end of the year.

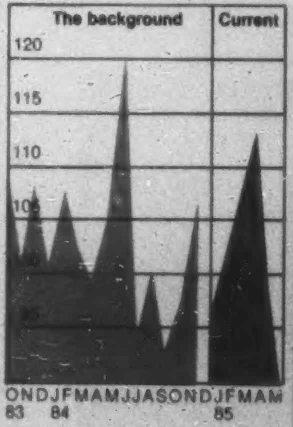
Also on an upbeat note, the employment picture (another key business barometer) remains buoyant, with the jobless rate remaining at 7.3% for the fourth consecutive month. The fact that factory overhead remains high can't be overlooked either. It is a sure-fire sign that factory

Leading indicators

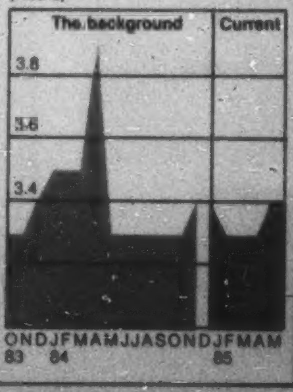
1. Capital appropriations
(Billions of dollars)



2. Consumer buying plans
(Index: 1969-70 = 100)



3. Factory overtime
(Hours)



activity is holding its own.

But this is not to say that certain imbalances aren't creeping into the economy. For one, manufacturing is now making up a smaller and smaller portion of overall activity. At latest report it accounted for only 20% of total GNP.

Our negative trade balance is certainly not something to be complacent about either. Imports probably exceeded exports by about $35 billion in the second quarter, which is enough to trim about one percentage point from the economy's overall real growth rate.

These latter developments bear close monitoring. On the other hand, they should not be enough to precipitate a downturn over the next three to six months. Beyond that it's anyone's guess.

Mirror, mirror on the wall, why do import prices fall?

The U.S. dollar may be off a bit from recent peaks, but you would never know it by looking at still-declining import prices (down another 2.3% in the first quarter).

One reason behind the continuing drop is the lag between the value of the dollar and import prices. It takes time for any shift in exchange rates to be reflected in the actual price level.

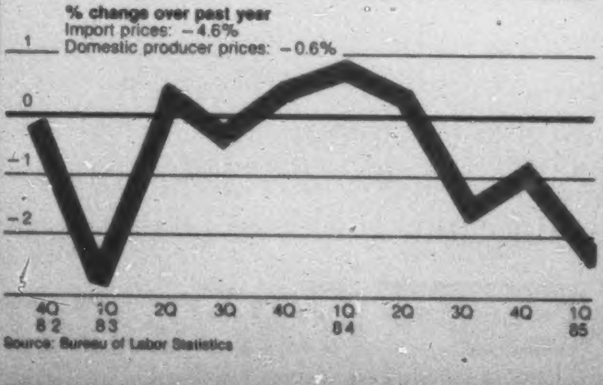
Then, too, the price decline in imports over the last few years has been far less than suggested by the dollar's strength. Implication: Overseas vendors still have lots of leeway to cut tags.

Whatever the reasons, import prices have declined pretty much across the board in recent months, with individual product groups shaping up something along these lines:

- **Crude materials:** First quarter import quotes dropped another 5.0%—highlighted by decreases for pulp and waste paper (-9.9%), crude rubber (-7.4%), metalliferous ores (-5.4%).
- **Intermediate manufactured products:** Quotes, off 2%, were down for the third consecutive quarter. Sharpest drops were in nonferrous metals (-6.2%), iron and steel (-2.2%), non-metallic mineral manufactures (-3.2%), and cork and wood manufactures (-3.8%).

Import prices head still lower

(Percent change)

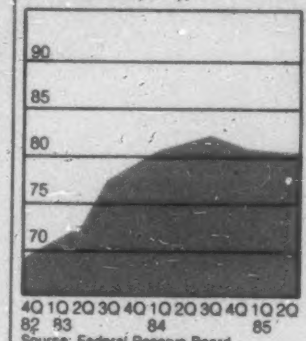


Source: Bureau of Labor Statistics

- **Chemicals:** First quarter prices dropped another 1.4%, pushing them 5.3% under year-ago levels. Most categories were down except for fertilizers where seasonal rises offset the general weakness.
- **Machinery and transport.** Prices fell for the second consecutive quarter. Largest declines were in electrical machinery (-5.7%), metalworking machinery (-4.0%), office machinery (-2.8%), telecommunications equipment (-2.0%), general industrial machinery (-2.3%), and specialized machinery (-1.8%).

Factory operating rates: no sweat

The overall trend
(% of rated capacity)



Source: Federal Reserve Board

Industry-by-industry
(Current rate—%)

Stone, clay, glass	77.0
Steel	71.4
Nonferrous	81.9
Fabric. metal products	77.9
Nonelectrical machinery	79.8
Electrical machinery	86.9
Automotive	86.7
Aerospace	79.6
Instruments	81.8
Textile products	77.5
Paper & products	94.8
Chemicals	71.0
Petroleum products	79.3
Rubber & Plastic products	90.5

Trim and fit, with a buyers' market to boot

There is still no sign of a capacity squeeze despite 2½ years of uninterrupted business upturn.

Operating rates on the factory level have actually been edging lower since mid-1984 (see chart). The reason is that industrial production has been virtually unchanged for almost a year. That's in sharp contrast to new production potential which has advanced some 3% over the same time period.

Now, for example, the typical U.S. factory is operating at 80% of its potential—well under the 83% reading of last year and nowhere near the 88% all-time peak hit in 1973.

And this situation prevails across the board, with operating rates in virtually every major industry below last year's highs.

In some sectors, rates are even below the 80% average. Industries hovering around the 70% mark include steel, aluminum, chemicals, and stone-clay-glass.

It's a continuing buyers market as every industry is running below its preferred rate, forcing vendors to look harder than ever for new business.

And the situation is not likely to change soon. Gains in industrial production, for example, will probably continue to lag capacity advances over the next 6-12 months thereby making operating rates decline even further.

CURRENT PRICES

Energy spurt drives prices up

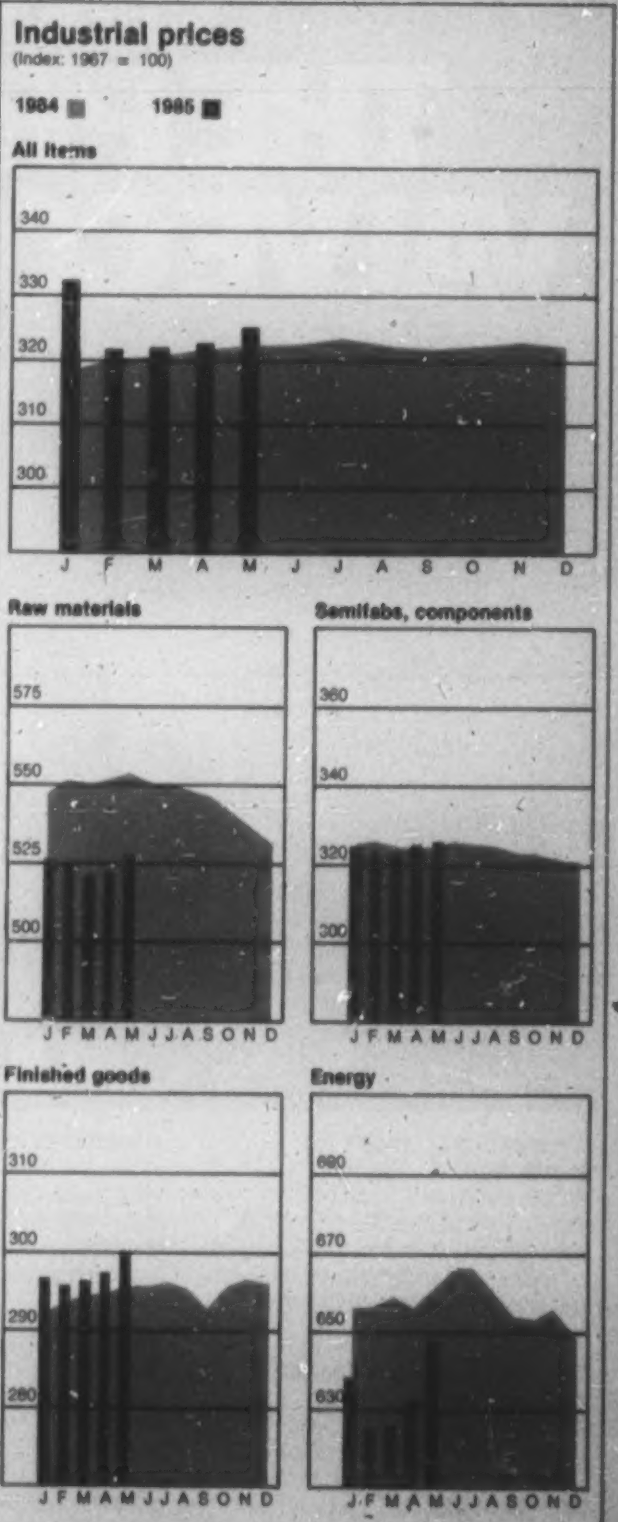
Don't be mislead by the 0.4% increase in industrial prices over the last month or so. That's the equivalent of a 3.6% annual rate of rise. It can be traced to the fuel and energy category which rose a whopping 2.3%, or over 25% at annual rate.

This energy spurt has to be regarded as temporary with sliding crude oil tags expected to exert new downward pressure here by late summer or fall.

Moreover, look at other sectors of industrial prices and the picture also suggests continued optimism. Thus crude material (excluding energy and food) actually declined 1.9% over the latest 30-day period. And the semi-fabricated and component

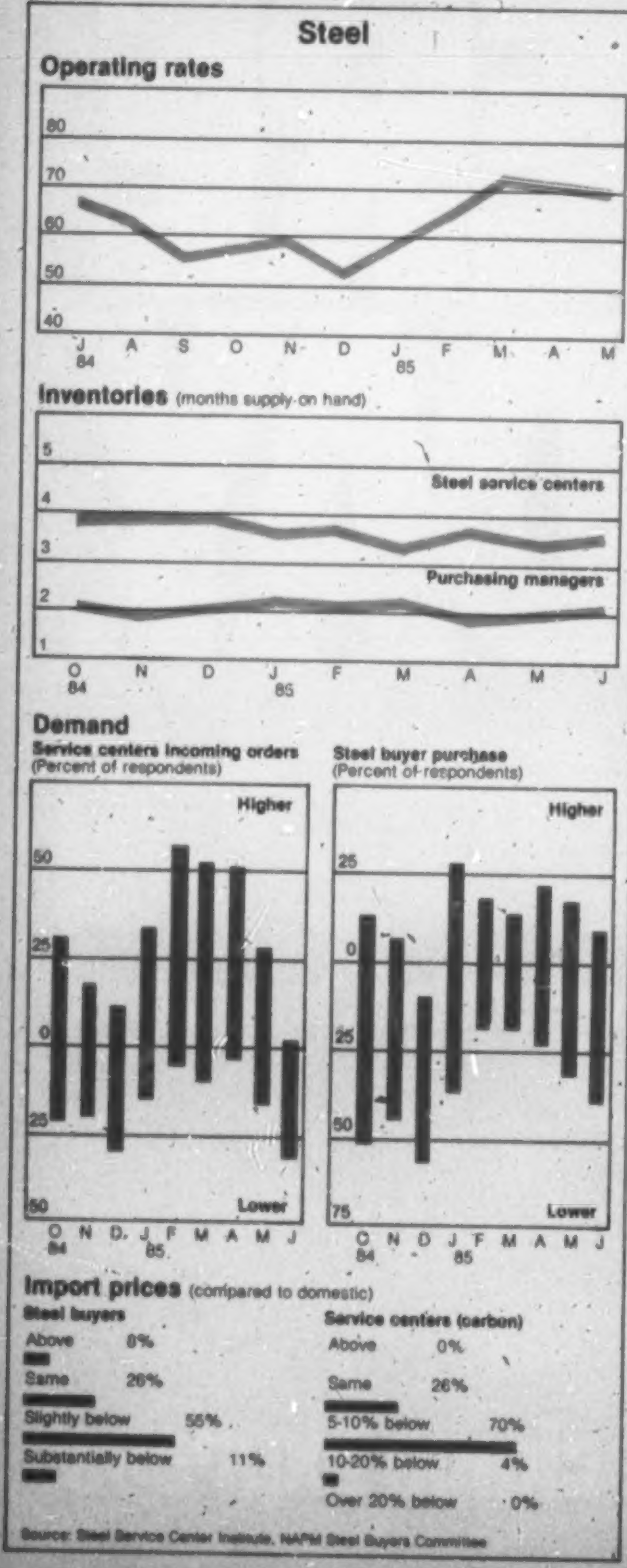
This month's breakdown

	Latest level (May)	% change from: Month ago	Year ago
Bearings	347.1	0.0	2.0
Bolts, nuts, etc	275.1	−1.2	0.0
Chemicals, inorganic	299.6	0.0	2.9
Chemicals, organic	350.5	−0.3	−5.7
Concrete products	320.2	1.0	3.5
Corrugated cartons	280.7	−1.4	6.8
Cutting tools, small	285.6	0.1	2.2
Electric lamps (bulbs)	344.3	1.7	1.2
Electronic components	198.7	0.0	3.7
Fans and blowers	358.9	0.0	3.6
Foundry and forge products	362.8	0.0	0.4
Fuel oil (residual)	1058.7	−2.7	−6.4
Furniture, commercial	350.9	0.3	2.9
Gasoline	576.7	5.8	−1.5
Glass, flat	221.8	0.6	−1.9
Glass containers	372.3	0.2	2.9
Gypsum products	317.5	−0.1	−12.9
Hand tools	373.8	−0.3	−4.7
Hand tools, power driven	231.8	0.3	4.2
Industrial furnaces	384.5	0.1	2.7
Integrating and measuring instruments	233.1	−0.1	2.0
Internal combustion engines	347.7	0.0	2.8
Lubricating oil	770.5	0.5	−3.4
Lumber millwork	310.8	0.4	2.2
Material handling equipment	294.5	0.2	2.4
Metal containers	358.2	0.1	2.9
Metal mill shapes (nonferrous)	315.3	−0.3	−3.5
Metal tanks	305.3	−0.2	−0.7
Motors and generators	352.0	0.4	3.5
Motor trucks	295.5	−0.2	4.7
Office and store equipment	154.9	0.0	0.5
Paperboard	282.1	−0.7	1.5
Paper boxes and shipping containers	273.7	−0.7	4.3
Paper office supplies	239.9	−0.2	−1.9
Paint	277.8	−0.9	2.9
Plastic resins	306.3	−0.6	−1.4
Precision measuring tools	264.0	0.0	4.2
Pumps and compressors	355.4	0.0	1.9
Refractories	372.3	0.6	2.9
Rubber belts and belting	355.5	0.6	2.9
Scales and balances	229.1	0.0	−0.8
Steel products	364.8	0.0	0.9
Switchgear	277.7	−0.1	−0.2
Textiles, synthetic fibers	157.2	0.3	−2.1
Textiles, gray fabrics	152.3	0.3	−0.9
Tires and tubes	239.6	0.2	−1.5
Transformers and power regulators	232.0	−0.3	2.1
Welding equipment	292.9	2.4	2.8
Wire and cable	204.2	0.4	0.7



Source: Bureau of Labor Statistics

BUSINESS DATATRAK



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

subgroup remained virtually unchanged.

The list of products heading down over the last month in these two categories is equally impressive. It includes inedible fats and oils, industrial chemicals, plastic resins, aluminum, lead, zinc, copper, ferroalloys, most metal scrap, paperboard, and paper packaging.

Capital equipment prices also present no problems. Declines in farm machinery, integrating and measuring instruments, and transformers will offset increases in aircraft, photo equipment, and welding equipment.

Indeed about the only basic subgroup heading higher (aside from energy) is building materials, where boosts were recorded in softwood lumber, plywood, millwork, concrete products, paving and roofing products, and flat glass.

And even here there were some soft spots—in paint, hardwood lumber, and gypsum products.

But perhaps the most reassuring signs of all are the still-big percentages of overall declines in the 50 product lines regularly monitored by *PW*. (See accompanying table). Specifically, 19 lines actually slipped from the previous month.

That has been the pattern for the last month or so. Upshot: Government price analysts see no sign of any meaningful acceleration. As one official puts it, "Assuming energy tags simmer down, as they almost certainly will, industrial price averages should be up only about 1% for 1985 as a whole."

STEEL SCENE

Humbug! The next few months will be tight

Both purchasing managers and service centers seem to agree that the next few months will not be that great for the steel industry. Demand will slow due to both the usual summer slowdown and the failure of durable goods production to rise in recent months.

Some 38% of buyers responding to the latest NAPM Steel Buying Survey say they will be cutting back on receipts of the metal over the next three months. That far outweighs the 10% who contemplate increases. This 10%, incidentally, is the lowest since the recovery began over 2½ years ago.

Metal distributors responding to the latest Steel Service Center Institute (SSCI) survey are equally as glum about the next 90 days, with 31% anticipating a drop in near term orders and only 3% seeing any improvement.

But these same distributors are still not particularly worried about the year as a whole. Their feeling is summed up by Andrew Sharkey, SSCI president, who notes that a recent drop in flat rolled product sales was due to a previous inventory build-up on the part of special product manufacturers—and beyond this interruption the outlook still looks fairly good.

Also contributing to the service centers' optimism is the fact that the portion of plate shipments they have been handling has been on the rise.

Also, some 31% of the service centers and 41% of buyers say inventories seem to have come down over the last few months. The goal is for more paring with nearly three out of five service centers contemplating further reductions of stock over the next few months and not one planning any increase.

The reasons for this tight-fisted policy aren't too hard to find—ready availability and the expectation of a relatively flat consumption pattern over the next few months as durable goods production continues to tread water.

The plentiful supply situation is further confirmed by the absence of product lines on the shortage list. Service centers see no problems anywhere.

Buyers are also suggesting that foreign competition may be intensifying. Some 11% now report imported metal coming in "substantially under" domestic types. That compares with a 3% reading last month.

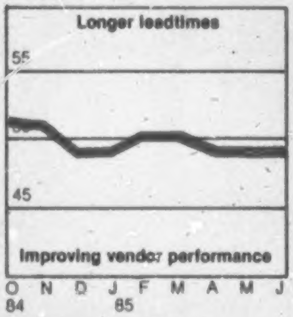
The big question is whether or not this will last as import quotas become an increasingly important factor. Service centers think not—37% expect to reduce their dependency on foreign metal by the end of 1985.

Further confirmation of a firming import market comes from a new steel study by Paine Webber. It notes that the spot price (essentially a reflection of import competition) is increasing about $20/ton this summer, partially recouping the big $60/ton slide of the past year.

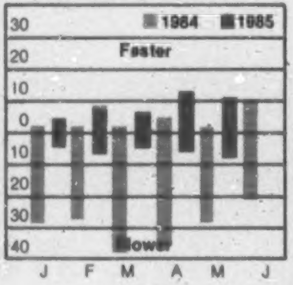
Monthly procurement status report

Leadtime index

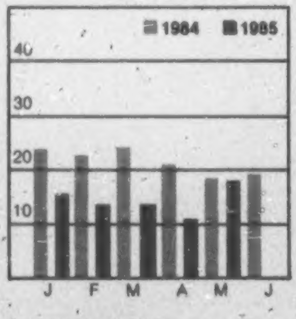
A "diffusion" index based on 158 key commodities. Avove "50" indicates a tendency for leadtimes to stretch out. Below "50" suggests improving vendor performance.



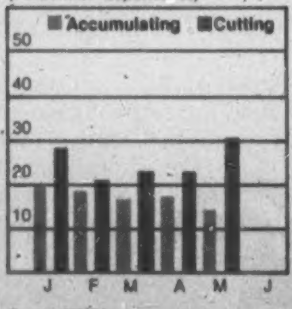
Delivery performance
(Percent reporting deliveries)



Forward commitments



Inventory strategy
(Percent of respondents)



Source: NAPM

PROCUREMENT STATUS

Summertime and the buying is easy

The start of the normally slow summer season virtually assures another few months of trouble-free procurement. But even without this added assist, there's plenty of evidence that things are pretty easy these days. To wit:

- **Leadtimes continue to edge lower.** *PW*'s exclusive leadtime index (at 49) is still holding under the neutral 50 mark, indicating that waits on average are still declining.
- **Faster deliveries still outnumber slower ones.** The NAPM Business Survey Committee finds 11% getting orders fast vs. 8% reporting slowdowns.
- **Not one item now appears on the NAPM short supply list.** That's been the case for four months now, reflecting ample supplies in all sectors.
- **Inventories are edging lower.** With little to worry about in delivery delays, parers (31%) now outnumber accumulators (14%) by better than 2-to-1.
- **Prices are still marking time.** The latest buyer surveys suggest that more PMs are getting additional concessions than are being hit with higher prices.

Also, few buyers feel that leadtimes can shrink much further. Consensus: Waits are about as low as they can go and could well inch up a bit by fall if the normal business pickup materializes.

And virtually everyone queried sees a continuation of a buyer's market. Observes one East Coast PM, "There's still nothing on the horizon to suggest any real change in the market—not with (1) essentially stable energy, raw material, and labor costs, (2) excess capacity, (3) still rising imports, and (4) vendors stumbling all over themselves to hold onto their share of what is now a basically flat market.

Leadtimes and availability

Chicago: Semiconductor leads are expected to drop further. But most other electronic parts seem to be holding. Declines (in weeks) are noted for potassium bichromate (½) and PVC (3-4). Coming out are cut-size paper (6-8), liquid chlorine (1) and sanded softwood plywood (2-3).

Cleveland: Some changes here. Coming in (in weeks) are hardwood lumber (1-2), softwood lumber (1), skids (1-2), corrugated boxes (2-3), folding boxes (2-3), steel canisters (1-2) and coil coating paint (4-5). But edging out are 2-ply fiber drums (2-3) and plastic resins (3-4).

Los Angeles: The summer lull has hit early—holding waits to these levels: galvanized steel (12-14), aluminum tubing (6), grey iron castings (5-6), domestic fasteners (4-6), custom seals and gaskets (4-6), electromechanical devices (6-8), and bearings (18-22).

...continued on page 74

million rate in the first and second quarters of 1986 as consumers start to pay their bills and sock a little more away.

Budget deficit

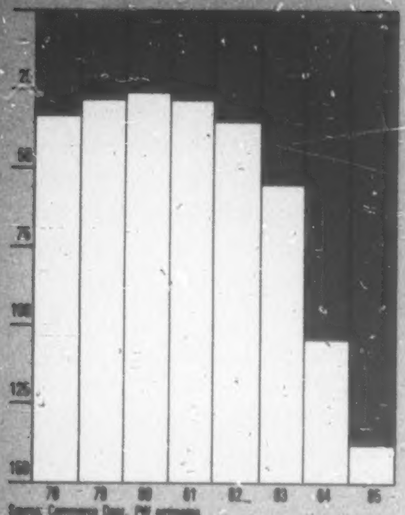
There's no good news on the Potomac. Uncle Sam will probably be swimming in about $200 billion of red ink for fiscal 1985. With a slowdown of the economy in 1986 (which will cut down on revenues), you can push that up to near $210 billion.

Much, of course, depends on whether Congress and the Administration will come up with a plucky deficit reduction plan. But even with such agreement, the deficit will continue at extraordinarily high rates for the forseeable future because it takes time—lots of time—for corrective action to show up on the books.

Trade deficit

The strong dollar—aided by high, deficit inspired interest rates—continues to make imports cheaper and our exports more expensive. As suggested earlier, manufacturing industries have had to bear the brunt of the onslaught, forcing them to cut output and lay off workers.

This year, the merchandise trade deficit may reach $140 billion, compared to only $61 billion and $107 billion in 1983 and 1984. And there's been little progress in stemming the tide via fixed agreements with our major trading partners, with only steel and textiles so far subject to major import quota limitations.


A burgeoning trade deficit
Billions of dollars

Source: Commerce Dept., PW estimates

The trade deterioration is even more dramatic when you compare imports to exports. From 1983 to first quarter 1985, imports rose $84.6 billion, or 31%, while exports rose only $22 billion, or 12%, over the same time period.

What does the new, more cautious outlook add up to as far as purchasing is concerned? Aside from watching Washington for clues on interest rates, the budget, and trade deficits, Paradiso advises a continued close-to-the-vest inventory strategy for the following reasons: (1) ready availability and quick delivery and (2) sales uncertainties as the economy gradually tops out.

He also urges plenty of shopping around as competition, excess supplies, and a decelerating economy are creating good bargains, especially for buyers willing to make long-term volume commitments.

Continued emphasis on overseas sourcing is also indicated. As *PW*'s economic consultant puts it: "Even if the dollar does edge lower, it will be 6-12 months before it begins to make any meaningful impact on overseas procurement costs.

Concern clouds PM's positive look on economy

A modest business pickup may be in the making for late summer or early fall of this year.

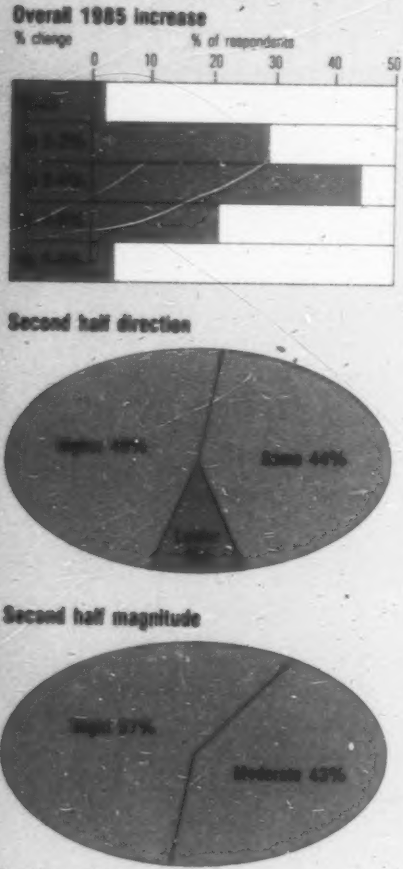
If the results of two new purchasing surveys are anywhere near correct, the second half of 1985 could turn out a shade better than the disappointing first half. And only a very modest acceleration of inflationary pressures is anticipated.

Few PMs seem very worried. Key buying parameters are expected to shape up along these lines:

- **Demand:** Roughly two of every five members of the NAPM Business Survey Committee are now betting that the next six months will be better than the first six months—double the number who feel that declines are in the offing.

Buyers responding to a nationwide *PW* survey are in agreement. Some 56% expect some modest improvement in the second half—just

Prices: a buyer perspective



Source: PurchasingWorld, NAPM

about double the 29% who figure on some slippage.

Both groups have downgraded their earlier estimates for the year as a whole. But the vast majority still believe that 1985 will end up solidly in the plus column. Nearly three out of four NAPM Survey Committee members still see overall 1985 equaling or topping 1984.

- **Prices:** There seems to be little concern about a major acceleration. *PW* readers now put the average 1985 price increase at around 3% —slightly under the 3.4% estimate they made at the beginning of the year. Only a handful of those queried see increases topping the 6% mark—and not one predicts increases in excess of 8%.

Viewed from another perspective, about one third of these PMs have downgraded their inflation forecast since the beginning of the year—far more than the 13% who now feel that their previous 1985 predictions were a bit on the low side.

Some of these buyers anticipate second half acceleration but they don't think it will be significant. NAPM Survey findings suggest that increases will be 1) selective rather than across the board, and 2) modest rather than severe. But not one single respondent sees a "severe" acceleration.

- **Inventories:** "Keep 'em lean" is still the motto of the day. More than half the buyers responding to the *PW* survey (54%) contemplate some paring over the next six months—although most of these PMs say the cutting will be modest. The remaining 46% are about equally divided between those opting for the status quo and those who will do some accumulating.

- **Supply** No major problems are anticipated. 70% of the NAPM Survey respondents say that their firms are operating below 90% of capacity—3% more than suggested at the beginning of the year. One reassuring fact is that 40% of these same respondents say that their firms' capital outlays will be higher than in 1984. And the vast majority of *PW* readers see no supply shortages ahead.

Survey respondents are also planning a series of strategies to keep things under control. Many buyers plan on making smaller purchases, placing more emphasis on just-in-time deliveries, working more closely with vendors, and better forecasting of needs.

Pricing isn't being ignored either, despite the absence of a major inflationary threat. Some of the approaches noted by buyers on this score: (1) negotiated price increases or no price increases, (2) insistence on price protection for upwards of one year, (3) increasing emphasis on overseas sourcing, (4) more value analysis, and (5) more long-term contracts.

Few of the more than 500 buyers queried in the combined surveys see a recession or serious price inflation ahead. Only 4% of the NAPM respondents are worried—the same percentage as six months ago.

That's not to say that everything is coming up roses. Some uneasiness is beginning to surface. Some 56% of the NAPM respondents now characterize themselves as "concerned." This is up from the 27% and 53% readings of last spring and fall.

Prices to remain in check

You can count on price restraint continuing in virtually every sector of the economy.

The latest Data Resources Inc. (DRI) quarterly price rundown tells the story. Not a single one of the 24 specific industrial product lines (see accompanying table) is expected to sport more than a 7% rate of rise over the next few years.

...continued

Price outlook into 1987

(comparison of second quarter pricing)

Product	Percent change 85/84	Percent change 86/85	Percent change 87/86
Raw materials, energy			
Finished lubricants	1.1	2.2	2.5
Miscellaneous chemicals	2.3	4.2	4.1
Pulp & paper products	1.4	4.0	5.9
Crude supplies (Excl. fuel)	-7.4	2.8	2.8
Metals			
Iron and steel	1.5	6.3	5.0
Galvanized sheet & strip	1.2	7.4	5.3
Stainless plate	-0.4	4.8	4.0
Foundry & forge shop products	1.8	4.9	4.5
Domestic copper cathode	-1.7	8.9	4.3
Magnesium pig ingot	3.5	6.0	5.1
Aluminum shapes	-1.8	5.3	6.0
Components			
Rubber belts & belting	1.8	3.2	3.6
Laminated plastic sheets	2.6	3.7	4.2
Bolts, nuts, screws	1.0	3.1	5.4
Relays	0.5	5.3	1.9
Linear integrated circuits	-6.9	0.0	1.5
Machine shop products	4.2	5.0	5.5
Construction			
Prepared paint	3.9	4.1	3.7
Plumbing fixture & fittings	2.7	5.8	6.5
Sand, gravel, stone	4.2	6.8	7.0
Gypsum products	-10.1	2.8	3.9
Machinery			
Metalworking equipment	3.0	4.7	5.0
General purpose machinery	2.6	3.7	4.8
Motors & generators	3.7	5.2	6.0

Source: Data Resources, Inc. Cost Forecasting Service

The overall averages are equally impressive. DRI equations suggest only a 1.1% increase in finished producer prices this year—2.2% and 3.7% advances seen for 1986 and 1987.

Analysts at DRI, the Lexington, MA-based econometric consulting firm, attribute the continuing inflation respite to three factors: (1) the declining but still strong U.S. dollar, (2) weak energy prices, and (3) unemployment in excess of 7%. This unemployment figure is particularly important since it is expected to hold employment cost increases to just 4.3% this year. Figures for 1986 and 1987 are not that much larger—5.0% and 5.6%.

Keeping all of the above in mind, here's a more detailed rundown of the DRI price projections for key industries:

Energy: The refiners' acquisition cost for crude oil is expected to continue dropping, reaching a low $26.40/barrel by early 1987. Residual oil will also decline over the next few years—at an average annual rate of 1.2%. This, in turn, should maintain downward pressure on natural gas, with tags remaining basically unchanged on the producer level over the next few years.

Electricity rates should edge up only moderately. The producer price index here will advance at a 4.6% annual rate over the 1985-87 period. Coal hikes will also be restrained as advances stay in the relatively low 3.4% yearly range.

Industrial chemicals: Flat or declining hydrocarbon feedstock prices, a strong dollar, and burgeoning overseas capacity will combine to keep a lid on tags. This year only a fractional 0.3% average advance is projected, as petrochemical quotes offset some firming in chlor-alkalis. Future increases are projected at 3.1% for 1986 and 3.5% for 1987.

Steel: The impact of voluntary restraints will be slow in coming—primarily because of recent large import purchases to hedge against expected price hikes later on. Look for the official steel price index to move up only 3% this year. And even in 1986 and 1987, competition will hold gains to just above 5% a year.

Nonferrous metals: [illegible]ppage of the dollar, combined with lower inventories and modest demand gains, could make for a slow climb in copper (6.8% annually for 1985-87). Even so, the red metal will still be commanding only 83¢/lb by late 1987—well under the highs of a few years back.

It's much the same story for aluminum. Slow but unimpressive increases to only about 63¢/lb by late 1987 are projected—far under the 75¢/lb highs that prevailed as recently as last year.

Construction materials: A flat building pattern over the next 2.5 years will hold price increases down. The index for fabricated structural metal products should increase at the relatively modest rate of 2.3% in 1985, just 4.7% in 1986, and 5.6% in 1987. The index for concrete products should move up only 3.2% this year and then rise at a 6% or slightly higher rate over the next two.

Machinery and equipment: The small advances of the last few quarters will persist. Averages will rise just 2.4% this year, 3.8% in 1986, and 5.1% in 1987. Imports will continue to hold prices down. Incoming shipments of machinery are targeted to increase 17.5% this year, 7.2% in 1986 and 8.1% in 1987.

Electronic components: Manufacturers still have to work down bloated inventories. Add in excess capacity and slower demand increases and the price advance over the next six months is likely to be only 1.5%. But the next two years look more bullish—with average increases put at 3.6% in 1986 and 4.4% in 1987.

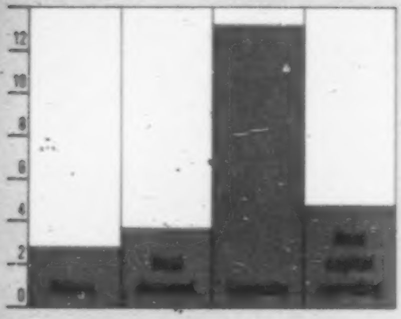
The DRI projections are still optimistic on the consumer price front. Energy prices through 1987 are expected to rise at only a 3.4% annual rate. Similar moderation is seen in food where increases are projected to average out near 4% over the forecast period. Even medical costs will moderate. The average annual rate is estimated at 6% through 1987—well under the 8.8% yearly advances noted over the last three calendar years.

...continued

A view from the top

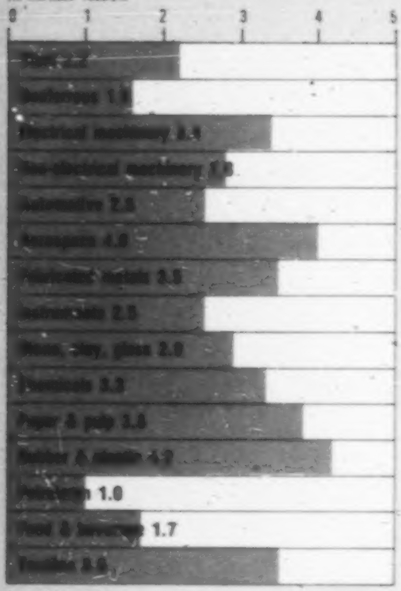
Overall factory trends

(% increase 1985/84)



Industry-by-industry price trends

(% increase 1985/84)



Source: McGraw Hill

Doubt grows as economy slows

Even with a potential recession being predicted for early 1986 by a lot of economic seers, and their own views that things aren't as snappy as they'd like, top business execs responding to McGraw-Hill's 1985 plant and equipment investment survey say they are fairly optimistic that 1985 will still turn out to be a good year.

A look at the survey's seemingly incompatible results (see accompanying charts) also reveals some growing doubt as first half of 1985 results prove disappointing and some negative trends creep into play.

Here are some basic trends projected from the survey results:

- **Demand:** Real sales should rise by a modest 3.7% this year—petroleum is the only one of 17 major subgroups failing to show a gain.
- **Prices:** Inflation, as measured by the prices manufacturers get for their products, will be held to a manageable 2.8%. Both non-manufacturing and plant and equipment prices will rise a bit faster (4.1% and 4.3%, respectively). But even these are tolerable.
- **Capital spending:** real outlays (spending corrected for inflation) will be up 13.2% for factories, although when the disappointing non-manufacturing outlays (down fractionally in real terms) are added in, the overall gain drops to just over 4.5%.
- **Capacity:** A big surprise here—with some hefty gains in store. The 13.2% increase in real capital spending for factories this year, when added to last year's big increase, will yield a 4.7% increase in production potential. Next year, the gain is expected to be an even more impressive 5.4%.

If nothing else, these figures should keep factory operating rates low. If you superimpose this year's expected 4.7% capacity increase on only a 3.7% real sales increase, you end up with a probable 1% decline in the average operating rate—a rate which at the beginning of 1985 was already at a meager 74.7%.

Operating rates, both overall and for most key industries, seem certain to remain far under so-called preferred levels—which, in turn, should continue to put a brake on any further price advances.

This price restraint is already evident in virtually all industrial sectors. A look at the accompanying chart shows that not one manufacturing industry will be sporting a price advance in excess of 4% this year.

In several instances, the estimated 1985 inflation figure is put around 2.5%. Included in the group are steel, nonferrous metals, automotive, instruments, petroleum, food, and beverages. In the service sector, airlines see rates doing little more than holding at relatively low 1984 levels.

The bad news

The McGraw-Hill survey is not without some negative aspects. For one, 1985 demand estimates are somewhat under levels projected last fall when real sales were expected to rise 4.4%, 0.7% more than currently projected.

Capital outlays have been pared a bit as well. The current overall real gain of 4.6% is 1.1% under the figure of an earlier survey. And the preliminary figures for 1986 aren't all that bullish either. A 2% decline is indicated even before making an inflation adjustment.

McGraw-Hill analysts hasten to add that extended projections usually turn out to be on the low side because many companies just do not have firm plans beyond one year. Nevertheless, they do feel somewhat uneasy, noting that "... the outright declines reported for 1986 create doubts about the sustainability of the current business expansion beyond the current year."

In light of this, anyone who is

overly optimistic about economic performance in the next 12 months must be catching the last of the three-martini lunches before the Administration's proposed tax plan sends them to eating at McDonalds.

Models present bullish view of economy

The nation's big econometric forecasting models are still bullish on America.

While a growing number of business analysts and economists (including *PW*'s own Dr. Louis Paradiso) are talking about the possibility of a modest downturn by early next year, the four models regularly monitored by *PW* are still projecting fair-sized gains into 1986.

The 3.6% average GNP advance projected for 1985 is unchanged from estimates made six months ago. And for next year, the 2.6% average advance now projected is actually above the 2.3% reading suggested at that time.

Many changes have been made in industrial production estimates, namely a toning down of 1985 advances from the previous 3.4% estimate to only 2.2% now. But here again there is some surprisingly good news—the average gain for next year is put at 2.7%—above 1985 and nearly double the 1986 projection made just six months ago.

None of the models signal any problems with inflation. The GNP price deflator is expected to average out near 4% for both this year and 1986. This is somewhat better than the 4.3% and 5.1% estimates for 1985 and 1986 suggested at the beginning of this year.

Behind the more optimistic price forecast: a continuing strong dollar, modest labor cost increases, ample or more-than-ample supplies, and still-soft energy prices.

The same downward-revised pattern noted for the all-inclusive GNP price deflator also shows up in finished producer prices—with the new estimate for 1985 put at only 1.3%—less than half the 3.1% projection made at the beginning of the year. And for 1986, an earlier estimate of 4.2% has been whittled down to 3.2%.

Consumer prices are expected to rise at a higher rate—3.6% in 1985 and 3.9% in 1986—primarily because of the big weight given to more inflation-prone service industries in this yardstick.

There is even something to cheer about on the interest rate front. Thus the prime rate is now projected in the 10%-plus range for 1985 and 1986—somewhat better than the 12.5% rates anticipated six months ago.

About the only disquieting figure is the continuing high unemployment rate. The 7%-plus figures previously seen for both years remain virtually unchanged.

Spokesmen for the four econometric models seem to agree that lower-than-expected increases in both inflation and industrial output should push the Fed to ease up a bit. This in turn would provide more encouragement for construction, big-ticket consumer purchases, and even capital equipment—areas which will then hype both GNP and manufacturing output.

Also worth noting: the close agreement among the four surveyed models. There is very little variation on the averages quoted above (in virtually all cases 1% or less). It should be very reassuring when four independent sets of projections from high-powered outfits with generally good track records come this close. ***PW***

PW's econometric model printout

Real GNP (% change)	1985	1986
DRI	3.2	2.3
Chase	2.9	2.4
Wharton	2.9	3.0
Merrill Lynch	3.0	2.8
AVERAGE	**3.0**	**2.6**
Industrial production (% change)		
DRI	2.4	3.0
Chase	2.0	1.7
Wharton	2.0	3.1
Merrill Lynch	2.3	3.0
AVERAGE	**2.2**	**2.7**
GNP price deflator (% change)		
DRI	3.5	3.3
Chase	4.2	4.2
Wharton	3.9	4.0
Merrill Lynch	4.1	4.4
AVERAGE	**3.9**	**4.0**
Finished producer prices (% change)		
DRI	1.1	2.2
Chase	1.4	3.6
Wharton	1.1	3.3
Merrill Lynch	1.5	3.8
AVERAGE	**1.3**	**3.2**
Consumer prices (% change)		
DRI	3.6	3.9
Chase	3.8	4.3
Wharton	3.4	3.3
Merrill Lynch	3.5	3.9
AVERAGE	**3.6**	**3.9**
Prime interest rate (%)		
DRI	10.7	11.3
Chase	10.3	10.0
Wharton	10.2	9.2
Merrill Lynch	10.3	10.4
AVERAGE	**10.4**	**10.2**
Unemployment rate (%)		
DRI	7.4	7.8
Chase	7.2	7.6
Wharton	7.4	7.4
Merrill Lynch	7.2	7.0
AVERAGE	**7.3**	**7.5**

BUSINESS DATATRAK

...continued from page 33

Houston: Changes in some big-leadtime items. In a bit are large transformers (above 10,000 KVAs)—to 4-6 months, and motor control centers—to 3-6 months. High pressure heat exchangers are out to 8-10 months. No changes in galvanized steel, plastic resins, and corrugated.

Philadelphia: Electronic items have eased to lower weekly leads: CMOS ICs (12-14), transformers (10-12), PVC and Teflon hook-up wires (6-8), PC boards (8-[illegible] [illegible]d panel meters (12-16). Power supplies have been steady at [illegible] weeks but are expected to drop somewhat by early fall.

Pittsburgh: No important changes here—with these weekly leads: paper bags (6), plastic bags (3-4), corrugated boxes (3-4), wire bound boxes (4-5), drums (1), fiberboard (3-4), laminating papers (6-9), steel strapping (2-3), seals (1-2), and polyethylene and PVC (5-6).

Leadtimes (in weeks)

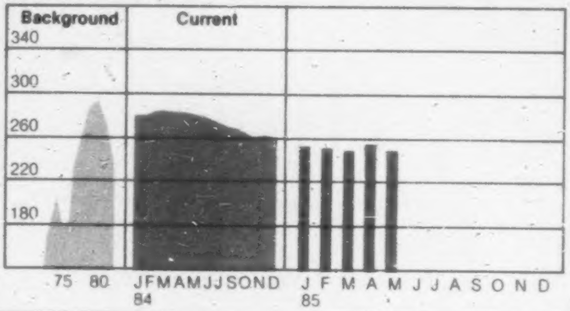
	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	4	4	9
C-R Sheet (Chgo)	6½	6½	5
Plate (Phil)	3½	3½	10
Plate (Chgo)	2½	2½	2½
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	7	7	7
H-R Bars (Chgo)	3	3	3
Cold-Drawn Bars (Phil)	7	7	7
Galvanized (LA)	13	13	14
Galvanized (Chgo)	7	7	6
Structurals (Chgo)	4½	4½	4½
Structurals (Hous)	17	17	17
Tubing (Phil)	7	7	7
Grey Iron Castings (LA)	5½	5½	7½
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	6	6	6
Pipe, Carbon (Hous)	13	13	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	13	13	17
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	7	7	7
ICs (Linear) (Phil)	15	15	17
Motors (Phil)	12	13	15
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	13	13	13
Relays (Chgo)	15	15	15
Resistors (Chgo)	10	10	12
Resistors, Wirebound (Phil)	8	8	10
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	1½	3½	3½
Plywood (Chgo)	2	2	2
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	1	2½	3
Softwood (Phil)	⅕	⅕	⅕
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Napthalene (Chgo)	2	2	2
Paint (LA)	4	4	5
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	3	3	3½
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	3½	3	3
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	3½	6	2½
PVC Resin (Pgh)	6	6	6
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	2½	3½	3
Cartons, Corrugated (Hous)	2	2	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	6	6	6
Shrink Film (Clev)	1	1	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	1	1	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	2½	4	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	11	11	11
Aluminum Plate (Chgo)	12	12	14
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	11	11	11
Brass Castings (LA)	6	6	9
Brass Rods (Chgo)	2½	2½	6
Brass Sheet (Chgo)	2½	2½	7
Brass Tube (Chgo)	1½	1½	5
Copper Fittings (LA)	3½	3½	3½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	7	7	5½
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	2	2	4
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	5	5	5
Zinc (Pgh)	2	2	2
MISCELLANEOUS			
Bearings, Domestic (Phil)	22	22	22
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	50	50	50
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	1½	1½	1½
Fasteners (LA)	5	5	7
Fasteners, Std. (Phil)	2	2	4
Heat Exchangers, Carbon-alloy Steel (Hous)	21	21	20
Heat Exchangers, Hi-pressure (Hous)	39	31	31
Insulation Mat'l. (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	2½	2½	2½
Pumps (Hous)	30	30	35
Pumps (LA)	9	9	9
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	17	17	17
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

(Index: 1967 = 100)

Latest month	252.9
Month before	257.1
Year ago	289.5

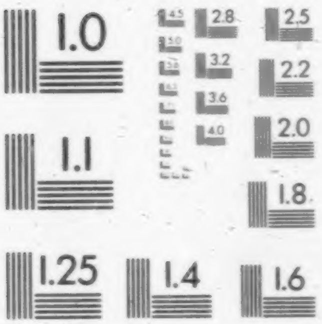


Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	347.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	25.10	25.10	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	23.95	23.95	17.50
Steel, bars, Pitts., cwt.	23.95	23.95	17.50
Steel, bars, C.R., Pitts., cwt.	29.25	29.25	26.00
Steel, plates, Pitts., cwt.	23.25	23.25	23.25
Steel, plates, H.R., Pitts., cwt.	23.25	23.25	23.25
Steel, sheets, C.R., Detroit, cwt.	27.10	27.10	27.10
Steel, strip, C.R., Chi., cwt.	35.30	35.30	35.30
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.500	0.520	0.665
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb.	5.35	5.35	5.20
Brass, red, 85%, [sheet], lb.	1.32	1.32	1.28
Brass, yellow, [sheet], lb.	1.27	1.27	1.23
Cadmium, ton lots, lb.	1.25	1.25	2.25
Copper, electrolytic, wire bars, refd., lb.	0.69	0.69	0.69
Copper sheet, over 24 in., lb.	1.41	1.41	1.37
Lead, common, N.Y., lb.	0.190	0.200	0.280
Magnesium, pig ingot, [99.8%], lb.	1.48	1.48	1.48
Mercury, 20 fl. lots, N.Y., fl.	295.00	293.00	324.00
Molybdenum Climax Oxide/bags, lb.	4.65	4.65	4.65
Nickel, electrolytic, producer, lb.	3.20	3.20	3.20
Platinum, producer, oz.	475.00	475.00	475.00
Silver, N.Y., oz.	6.18	6.28	8.67
Tin, Straights, N.Y., lb.	5.99	5.79	6.39
Zinc, Prime West, East St. Louis, lb.	0.44	0.45	0.53
Zinc, die casting alloy, No. 3, lb.	0.505	0.515	0.595
PAPER			
Uncoated book #3 offset, ton	850.00	850.00	810.00
Watermarked bond, ton	985.00	985.00	985.00
Gummed sealing tape, carton	16.25	16.25	15.45
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	495.00	495.00	475.00
Wrapping paper, std. distributor cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	320.00	320.00	320.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	0.324	0.352	0.297
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.04	1.04	1.04
Cotton middling, 1", N.Y., lb.	0.594	0.602	0.782
Printcloth, 48", 80x80, N.Y., spot. yd.	0.60	0.63	0.76
Army duck, 37", 13 oz., yd.	1.70	1.70	1.90
Blended printcloth, 64", 78x54, yd.	0.70	0.70	0.76
20s combed yarns	1.95	1.95	2.16
Wool tops, N.Y., lb.	3.60	3.60	3.60
CHEMICALS			
Acrylonitrile, tanks, lb.	0.455	0.455	0.455
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	210.00
Benzene, petroleum, tanks, Houston, gal.	1.48	1.51	1.41
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	0.58	0.58	0.58
Formaldehyde, USP, 37% [12% to 15% meth.], tanks, lb.	0.106	0.106	0.106
Glycerine, synthetic, tanks, lb.	0.91	0.86	0.81
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.54	0.54	0.45
Naphthalene, crude, tanks, lb.	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.270	0.305	0.305
Polyethylene resin, low density liner film grade (market price), lb.	0.280	0.280	0.415
Polypropylene, homopolymer grade (market price), lb.	0.330	0.330	0.415
Polystyrene, general purpose grade (market price) lb.	0.35	0.35	0.41
Shellac, bone dry, N.Y., lb.	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.26	0.26	0.35
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	157.50	157.50	140.00
Sulphuric acid, 66%, commercial, tanks, ton	56.85	56.85	56.35
Titanium dioxide, anatase, reg., carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.	1.36	1.36	1.33
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	303.95	302.25	316.25
Lumber, 2x2, pine, mbf, cl	304.60	299.95	312.40
Plywood, plyform, ¾", msf, cl	571.80	566.95	569.65
Plywood, ⅜", msf, cl	378.50	367.85	367.20
Cement, bulk, ton, tl	64.94	64.76	61.37
Sand, ton, cl	6.24	6.24	6.05
Ready-mix concrete, 3,000 psi/cu.yd., 15 cu. yd.	47.74	47.64	45.50
Crushed stone, 1½", ton, cl	7.63	7.62	7.68
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.81	0.80	0.77
Gypsum sheathing, ½"x1"x8", msf, tl	207.94	207.94	203.15
Brick, common, per thousand, tl	181.10	180.28	176.03
Asphalt paving, AC-20	175.36	175.64	165.20
Concrete sewer pipe, 12", prem. joint, per foot, cl	7.23	7.24	6.97
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl.	20.00	22.25	27.50
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	25.50	28.75	31.75
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.830	0.860	0.770
Gasoline, 94 oct., reg., Chi., tank car, gal	0.833	0.818	0.790
Heating oil, No. 2, Chi., bulk, gal.	0.747	0.775	0.853
Heating oil, No. 2, N.Y., bulk, gal.	0.725	0.800	0.818
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.50	26.50	26.50
Jet kerosene, gal.	0.670	0.715	0.775
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.355	0.355	0.410
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	69.00	72.00	95.00
Steel, No. 1, hvy., dlvd., Chi., ton	62.00	67.00	84.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	0.545	0.570	0.585
Copper, No. 2, East, wholesale buy,	0.460	0.480	0.495
Brass, red, East, wholesale buy, dlvd., lb.	0.505	0.530	0.545
Brass, yellow, East, wholesale buy, dlvd., lb.	0.325	0.330	0.380
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	0.290	0.290	0.420
Alum., mixed clip., E., wholesale buy, dlvd., lb.	0.320	0.320	0.450
Zinc, old, East, wholesale buy, dlvd., lb.	0.140	0.140	0.230
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.100	0.110	0.145
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	12.00	15.00	35.00
Paper, old corrug. box, dlr., N.Y., ton	10.00	10.00	32.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.10	0.10	0.14
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.23	0.26	0.33

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

MICROCOPY RESOLUTION TEST CHART
NBS - 1010a
(ANSI and ISO TEST CHART No. 2)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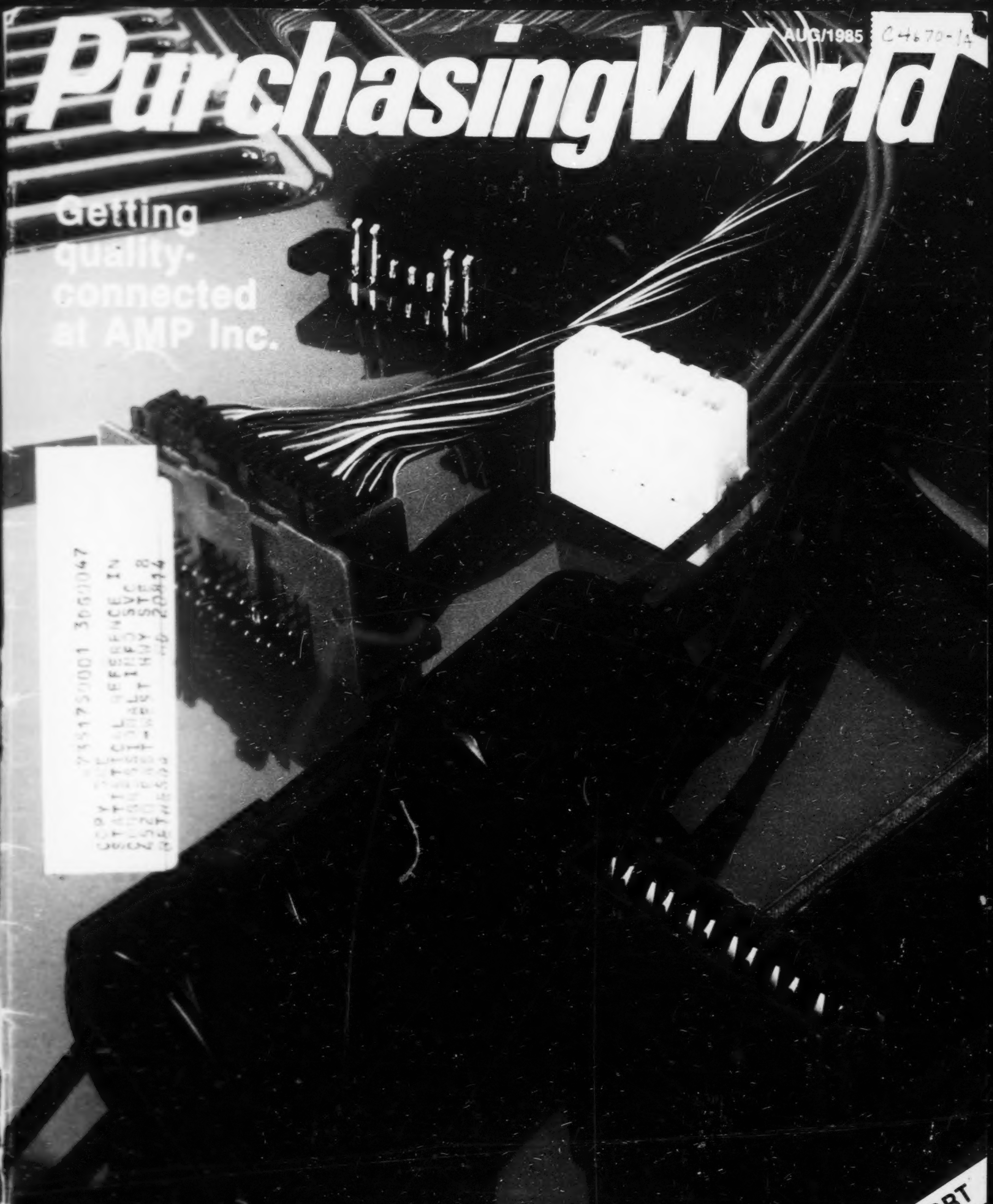

Getting quality-connected at AMP Inc.

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SOFTWARE REPORT

PurchasingWorld

Helping you manage the business of buying

Vol. 29 No. 8-August 1985

Features

31 Getting quality-connected at AMP Inc.
When a good and valued customer asks you to join in their efforts to improve quality, you owe it to yourself to give them an attentive hearing. The message to 160 suppliers of electronics industry superpower AMP Inc., of Harrisburg, PA, was delivered last summer at AMP's Supplier Awareness Days. This PW interview with director of corporate purchasing Earl Hennenhoefer describes the elements of AMP's commitment to quality improvement as an on-going process.

36 How to make smart software purchases
Here's our compendium of tips on how to evaluate software for purchasing and manufacturing applications. And there's more. You will find a listing of almost 50 currently available software programs and their capabilities.

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50 "Spedition" coming to U.S. transportation
A Computer-based system that links manufacturer, distributor, warehouses, and providers of transportation services in one common network is in the not-too-distant future, according to Rodger D. Wasserman, president, American Delivery System, Detroit.

60 Enter PW's Buyer of the Year Competition
Managers and department heads, this is your chance to single out a buyer from your company for special recognition in PurchasingWorld's first ever, annual Buyer of the Year competition. Turn to our announcement and entry form for details of how you may nominate a deserving buyer for this singular honor—which carries with it a valuable prize of an electronic typewriter for your company. Three winners will be selected in each of three categories based on size of plant location.

BUYER OF THE YEAR

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62 New "toys" in your electronic future
If you thought that decision making in purchasing in high-tech industries was going to get easier, forget that thought. Here's a forecast from Jerry Wasserman, vice president of Arthur D. Little Inc., Cambridge, MA, that sheds some light on exactly which high tech developments are likely to grow faster, slower, etc.

Cover Photo: Courtesy of AMP Inc., Harrisburg, PA

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PW PREDICTS

Robert S. Reichard, executive editor

All's quiet on the price front

Continuing pressures promise to hold prices in check for the rest of this year and probably into early next year.

One big factor is that first half 1985 economic performance suggests overall inflation (GNP basis) may well turn out to be under the 4% rate projected by most business analysts and econometric models. Industrial tags are even rosier with all signs pointing to only a 1% advance for all of 1985.

But optimism is based on more than year-to-date performance. Keep in mind that virtually all of the forces that held prices down in 1984 and early 1985 will continue in the next few quarters. These include:

- **Continuing strong dollar:** Even though some 5% has been knocked off the early 1985 peak, things have stabilized following the decline, and the dollar remains high enough to assure continued inflow of cheap imports and price restraint by domestic producers.
- **Weakening crude oil position:** New declines seem inevitable as the world glut grows and OPEC proves unable to hold member nations to production quotas. The rule-of-thumb Data Resources Inc. uses to illustrate the impact of oil price declines on prices is that every $1/bbl drop in price of oil brings the overall cost-of-living index down 0.2%.
- **Soft raw material prices:** The *PW* Raw Materials Price Barometer (see accompanying table) is actually running more than 10% under a year ago as Third world nations continue to produce as if there were no tomorrow and as U.S. production requirements continue with little or no advance.
- **Relatively low operating rates:** The domestic factory utilization rate has actually shown some fractional declines in recent months as production marks time and new capacity comes on stream at a 2-3% annual rate.
- **Continued wage restraint:** Pay rates show little indication of rebounding from the subdued pace established over the past few years. The overall 1985 increase, for example, is expected to run only in the 4-5% range. This cannot be underestimated since two-thirds of every sales dollar can ultimately be traced back to labor.
- **Bumper food crops:** Good growing weather this summer, combined with smaller U.S. food exports, will limit food price increases to 2-4% this year. Even meat prices have failed to rise as expected.
- **The Fed's cautious monetary stance:** While some easing has been noted lately, there is little indication of a shift back to easy money days. Few economists, for example, expect the prime rate to drop and stay under 9% for any length of time. Even if this did occur, it would take at least 6-9 months to have any inflationary impact.

If there is still any doubt about today's buyers' market, take a look at the latest NAPM Business Survey Committee results: For seven consecutive months now, buyers experiencing price declines have been outnumbering those hit with increases.

R&D outlays

Research and development expenditures will hit a peak of $78 billion this year—an 11% gain over 1984.

That's what top corporations are telling McGraw-Hill survey takers these days. And, because R&D price inflation is expected to be minimal, all the advance should be real.

Even hard-hit industries such as steel and nonferrous industries, which expect 25% gains, are jumping on the R&D bandwagon. (See accompanying chart)

But the big outlays will continue to center in the traditional sectors: $18.3 billion for aerospace; $16 billion for electrical machinery; $10.3 billion for nonelectrical machinery; and $8.1 billion for chemical industries.

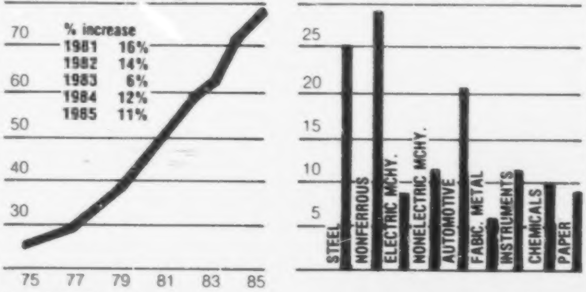
The computer industry, with a planned 11.4% increase in R&D, is concentrating more than half of its efforts on software development rather than on hardware.

Projected 1985 R&D is also strong compared to capital spending—accounting for 20% of total plant and equipment outlays.

Equally noteworthy is the still-rising percent of sales dollar being earmarked for research. This year it will hit an all-time high of 3.1%. In some specific industries the percentages are real eye-openers: 20% of sales in aerospace, and 12% in instruments.

And the rosy picture doesn't stop at 1985. Over the next three years, gains are expected to be around 7% annually.

R&D: another strong year



Source: McGraw-Hill

Textiles

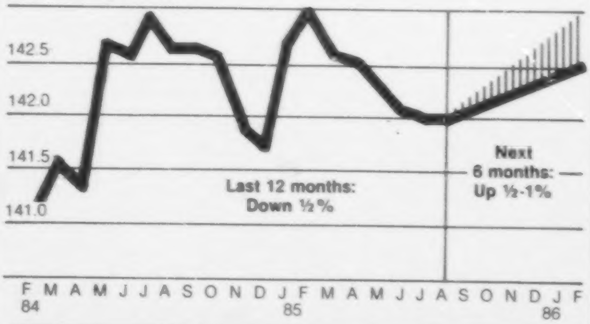
CURRENT SITUATION: It's turning out to be another competitive year as imports continue to take a heavy toll on domestic sales. If there's any doubt about the industry's problems, look at these statistics: 1) Domestic mill production is running 8% under a year ago, 2) operating rates are at only 76%, 3) mill employment is down 7% from a year ago, and 4) prices continue to edge lower. Manmade fibers are off 2%—with grey fabrics lagging 1% behind 1984. Even this doesn't tell the whole story—competition is reducing actual transaction prices even more.

DEMAND: Don't bet on any near-term turnaround. Aside from the import problems, there is a good chance that consumers will become more cautious—on a combination of decelerating GNP gains, smaller advances in discretionary income, and high consumer debt (18% of income versus the historical 15.5%). Domestic mill men (responding to a recent survey) are still hoping for a 1.5-2% gain for 1985, but this seems overly optimistic—especially when mill production trends point to as much as a 5% decline for 1985.

SUPPLY: Imports plus domestic potential adds up to a continuing glut. Incoming shipments of combined textile and apparel have leveled off—but at very high levels. Even if they begin to tail off, there would still be plenty to go around since domestic mills are now operating at only 76% of capacity. Manmade fiber activity is at only 80% of capacity. And cotton bumper crops have led to a 4.4 million bale carryover this summer. **An even bigger 6.8 million bale excess is expected a year from now.**

PRICE OUTLOOK: Count on weakness prevailing into 1986. Price averages may indeed inch up 1% or so but that's about it as supplies continue to exceed demand and low priced imports undercut the market.

Textile mill products
(Index: Dec. '75 = 100)



Steel

Demand won't be strong enough to allow for any appreciable near-term price firming, especially on volume flat-rolled products. For the year as a whole, price averages on a transaction basis (for the overall steel mix) could end up 2% under 1984 levels. As for second half shipments, right now the industry is talking about 37 million tons, close to the January-June performance. But some progress is expected in the drive to stem imports—with the first half's 12.5 million-ton incoming total expected to drop by as much as 2 million tons over the rest of the year—as import quotas begin to have some impact.

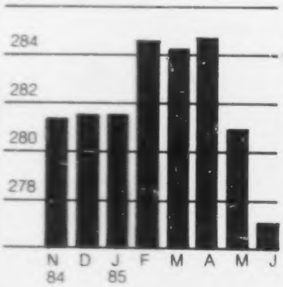
Electronic components

Markets continue to be shaky, as inventory paring keeps downward pressure on prices. Demand is way down. Semiconductor dollar totals are expected to be off some 10% this year in marked contrast to last year's big 35% spurt. The new forecast, supplied by Henderson Ventures, predicts strong deceleration in passive components where last year's 20% advance will dwindle down to 2.5%. And 1986 doesn't promise any major recovery. Semiconductor and passive component dollar deliveries are expected to rise by only 9% and 5%—a modest gain for what was one of the nation's top growth industries.

Paper products

Linerboard is still relatively soft and readily available at $290/ton. Some transaction prices are even lower—in the $260-270/ton range. This softness is in turn putting downward pressure on corrugated cartons which have dropped about 5-7% since the beginning of the year, with further declines possible. Other signs of easiness: the continued postponement of a newsprint hike (now scheduled for September) and the dropping of premiums on imported coated papers. On the other hand, uncoated white papers have firmed—with at least part of a $60/ton boost expected to hold.

Corrugated box prices
(Index 1967 = 100)



Aluminum

Buyers continue to call the signals. Ingot has sunk under 50¢/lb. Other signs of softness: 1) the recent 15% decline in aircraft extrusions to bring them in line with actual market quotes, 2) more drops in secondary ingot, and 3) continued import pressure, especially in the mill product sector. Produc-

Lead

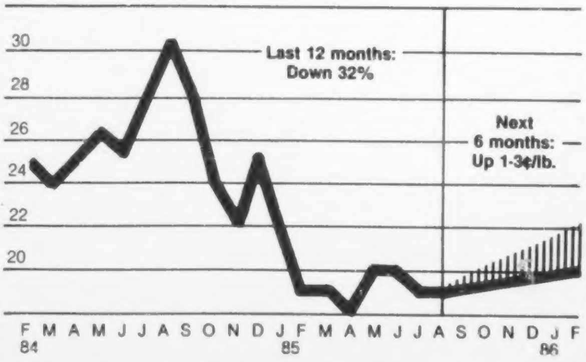
CURRENT SITUATION: The heavy metal continues to take its lumps these days— with prices dropping to under 20¢/lb recently. The soft domestic market is mirrored overseas where the LME has recently been down under 18¢/lb. Behind the weakness: 1) the summer seasonal lull in battery demand, 2) gradual elimination of leaded gasoline, 3) rising producer inventories, and 4) a relatively strike-free year.

DEMAND: A less-than-successful battery year and continued phaseout of lead in gasoline suggest little overall improvement here. Best bet: Domestic usage totals will remain at or near last year's 1.1 million-metric-ton level. Even this may be overly optimistic—one producer predicts sales may be off as much as 5% this year. Longer term projections don't look that much better. **Analysts see only a 0.5-1% annual creep up over the next decade.**

SUPPLY: Rising producer stocks, which have almost doubled since the beginning of the year, tell the story. The inventory buildup in the face of lagging demand has forced one major U.S. producer to shut down for all of July—and there's still more than enough to go around. Added pressure is coming from overseas. **All signs point to about a 10% increase in Free World mine output in 1985**—offsetting 1984's strike-impacted decline.

PRICE OUTLOOK: Prices are probably as low as they're going to go—primarily because most mines and secondary smelters are losing money today. **However, there's little indication of any sustained rally.** The start of the battery-buying season could firm the market a bit by this fall. But any price advance should be quite moderate—tags shouldn't move above 22¢/lb this year. Overcapacity and stagnating demand should keep prices about the same for 1986 as well.

Producer lead
(cents/lb.)



tion cutbacks will help stabilize the market, but any big rebound seems remote as shipments advance only 2-3% this year. Best bet: Some leveling off by autumn. Market ingot probably won't reach even the 55¢/lb mark by the end of the year.

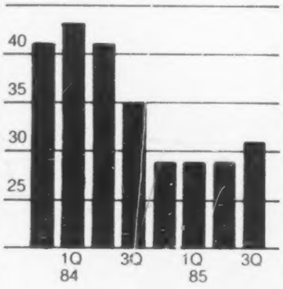
Zinc

Markets remain shaky, with prices dropping down to near 41¢/lb—some 3¢/lb off previous official lists.Even bigger breaks are being offered by merchants. European producer prices have also dropped another $50/ton (to $830/metric ton). Some leveling off is likely before too long, reflecting both the normal fall in business pickup, relatively trim inventories, and continued strength in such zinc-using industries as automobiles and housing. Another plus sign: increased use of the metal in cars. Some price firming can't be ruled out by year-end. But gains will only be on the order of a few cents—not nearly enough to to bring the 1985 average up to last year's 49¢/lb level.

Low-density polyethylene

New price boosting attempts (ranging as high as 5¢/lb) will be only partially successful. That would mark a major change from earlier this year when both first and second quarter boosts failed to hold. Best bet for the liner/film grade transaction price over the next few months: 30-32¢/lb. Also suggesting modest firming: rising European tags that should cut down on shipments to the U.S. On the other hand, a big increase seems remote as ethylene costs remain low, demand rises 1-2% this year, and operating rates hold in the 80% range.

Low-density polyethylene (liner/film grade)
(Transaction price, ¢/lb.)



Styrene

Prices are moving up into the 30-31¢/lb range, up as much as 5¢/lb from recent levels. Behind the advance: rapidly increasing benzene cost pressures, with styrene feedstock up 30¢/gallon since March. The new styrene increase is also putting new upward pressure on polystyrene (recently in the 35-37¢/lb range for general purpose material). Several firms have already announced new boosts.

Copper

The summer doldrums are taking their toll. Quotes are sinking into the mid-60¢ range. Adding to the downward pressure

Portable computers

Purchases up, prices down—that's the gist of a new Frost & Sullivan report on portable computers which takes a hard look at this industry from now through 1989. Some of the key findings:

- Unit costs (in 1984 dollars) will drop because of standardization of production and tough competition. Today's average price of $1,750 could easily drop to $1,300 by 1989.
- Volume gains will average about 11% a year, with the total number of units approaching 2.1 million by 1989 (versus an estimated 1.5 million this year).
- Volume gains will taper off over time as the market matures. This year's estimated 19% advance is expected to slow down to 5% by 1989.

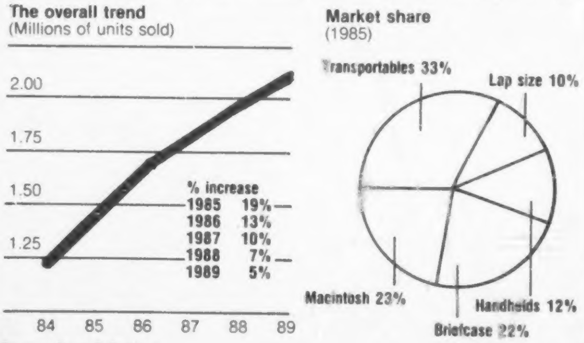
Growth rates are expected to differ among the five different types of portables analyzed. Frost & Sullivan researchers say that briefcase sized models will post the biggest advances—projections call for growth rates of 24% a year in units, 14% a year in dollars. Fully functional models with full-page displays are expected to be on the market by next year. And a significant decline in cost after that is expected to further encourage sales.

On the other hand, transportables and hand-held models are expected to decline in both units and revenues. Thus, transportables, which were the biggest sellers in 1984 with 444,000 units, will fall by more than 8% a year through 1989 (to 286,000 units).

The market for lap-sized models (expected to grow in units but not sales revenue) is more ambiguous. A Frost & Sullivan spokesperson says that these units do not have extensive application potential, but they appeal to many buyers on the basis of price alone.

Another trend that buyers may want to note: Competition is expected to whittle down the large number of manufacturers now in the portable computer field.

Portable computers: how the market shapes up



Source: Frost & Sullivan

are cut-rate brass mill product imports—said to be coming in some 20-30¢/lb under comparable domestic producer levels. Nevertheless, supply-demand fundamentals suggest a pickup by fall as North American cutbacks help trim inventories and Free World refined demand moves up another 3-5% this year. Another boost could come from increased Chinese purchases. Prices could move up to near 70¢/lb by early fall, and may approach the 75¢/lb mark by November or December.

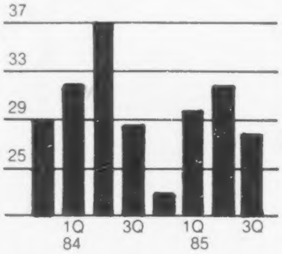
Computer software

Prices are still tumbling. Discount retailers and mail order houses are now offering big markdowns on most programs. Some of the software firms themselves are getting into the act either by introducing new programs at extremely low prices or by offering discounts to volume buyers. These discounts often include contracts for technical help, new product previews, and various other services that aren't readily available through middlemen. Another ploy designed to bring down overall cash outlays: the modification of sophisticated products for the low end.

Polyvinyl chloride

Prices are a bit wobbly these days. Transaction quotes for pipe grade are now reportedly in the 28¢/lb range—far under the 34¢/lb high of April and back to where they were at the beginning of the year. One of the reasons: high pipe inventories which, in turn, have pushed PVC pipe tags as much as 20% under last year's levels. Low operating rates (only about 75% for 1985 as a whole) and restrained shipment gains (only 1.5% this year versus more than 10% in 1984) are also expected to keep a lid on prices.

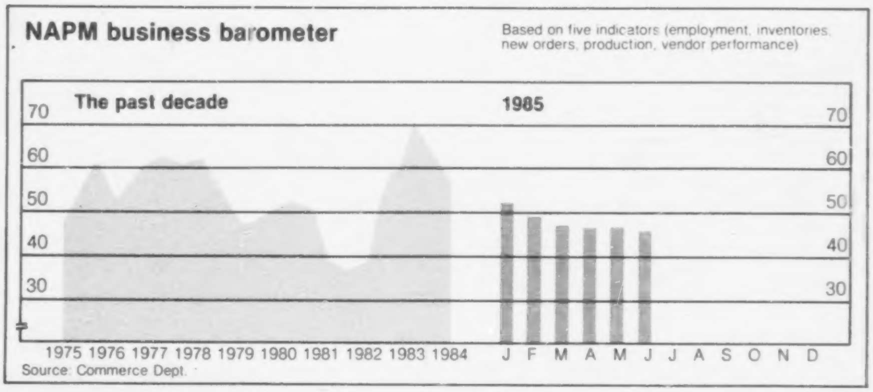
PVC (pipe grade)
(Transaction price, ¢/lb.)



Computers

Prices are still falling—IBM has slashed prices 6-23% on some mainframes and mid-sized models, and AT&T has knocked 20% off some minicomputers. At the low end of the market, Atari's new 520 ST Personal Computer (a 512K machine with monitor and disk drive that lists for $799) could put downward pressure on Apple's II line (similarly configured but with less memory) which lists for over $1,000. Another sign of easiness: Microcomputer sales at latest report were virtually flat—down more than 30% under last year's levels.

BUSINESS DATATRAK


NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance)

Source: Commerce Dept.

KEY ECONOMIC TRENDS

Pesky problems persist, bright spots seen

The next few quarters don't look all that bad. Granted, there are some negative forces working such as the advanced age of the current recovery (now over two-and-a-half years old), the relatively strong dollar, and the huge budget and trade deficits, but there is also some good news.

Housing and autos, for example, are doing very well. As one economist noted, "It would be very difficult, if not impossible, for the economy to slide into a recession while these two industries are so strong."

Even capital spending remains relatively healthy. Recent surveys suggest about a 6% increase in real (adjusted for inflation) plant and equipment outlays this year. And machine tool orders, another indicator of capital spending, have not dropped in recent months as many analysts predicted. (See accompanying chart). Much of this buoyancy can be traced to increased orders from the auto, aerospace, and defense industries.

And other positive factors include slowly declining interest rates and still-low inventory/sales ratios. The former should help loosen corporate and consumer purse strings while the latter guarantees that new orders will be quickly translated into production gains.

Booming construction awards also suggest higher output. These "new orders" for construction are close to last year's highs and should help keep demand up near peak levels for building materials, appliances, and home furnishings.

The last three months have been the strongest ever in total construction awards. F.W. Dodge economist George A. Christie says the current escalation, after holding at a year-long plateau, is a "breakthrough" that will rev up the industry to full strength in the second half of 1985.

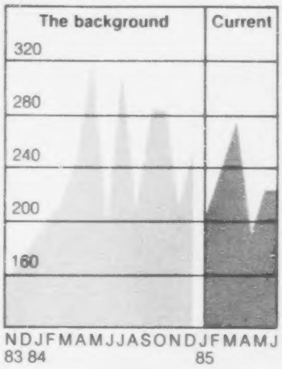
Irwin Kellner, chief economist at Manufacturer Hanover sees another positive note in the construction outlook: "Three years ago when mortgage rates topped 18%, all but 15% of U.S. households were precluded from buying a home. Now that fixed mortgages are down to 12%, some 40% of U.S. households can afford to buy a house."

Consumers will be doing their part in other areas as well to keep activity in high gear. Even though the level of installment debt is high, it doesn't seem to be curtailing purchases to any great extent.

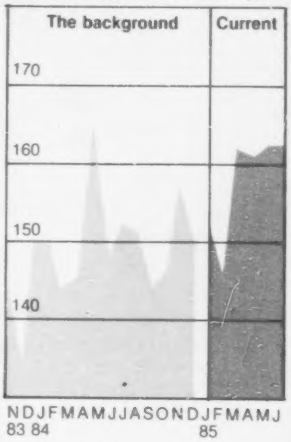
This is best appreciated by looking at the savings ratio (savings as a percent of disposable income). Note in the accompanying chart that the ratio is far under the 1981-82 recession levels. Some consumer surveys indicate the rate could edge down in

Leading indicators

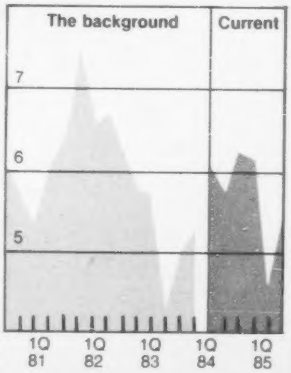
1. Machine tool orders
(Millions of $)



2. Construction awards
(Index: 1977 =100, seas. adj.)



3. Savings rate
(Percent)



the second half of the year, perhaps back into the 4.5-5% range.

Combined with other positive factors, this could mean that industrial production—stagnating for almost a year now—may be ready for a modest advance. The second half index could rise into the 168 range (1967 = 100)—a gain of nearly 4% at annual rate over the first half performance.

This, in turn, could breathe new life into the real GNP—pushing totals up at 3-4% annual rate through year-end. That's better than the anemic 1.5% pace of the first six months.

All in all, there still seems to be some life in the recovery that began in the first quarter of 1983.

Office space costly, rising higher

Finding reasonably-priced office space in new central city buildings is becoming increasingly difficult.

A new survey of office space in 15 U.S. cities by Howard Ecker & Co. finds that the average rate in central building districts jumped 14.1% over the last year. The actual dollar figure is put at an average $27.33/square foot.

And that's not the whole story. For example, space in a prestigious office building in New York City goes for an astronomical $50/square foot or more. These high, rapidly rising rates are not new.

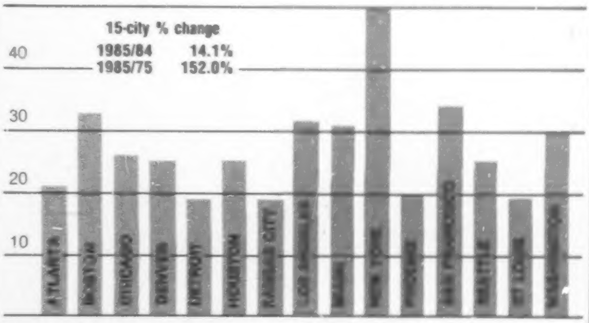
The study also contains estimates on what it would cost to move and maintain an employee in each of 15 surveyed cities—based on non-rental costs plus one year's rent for 200 square feet of office space (a widely accepted average of the amount of space required by the typical office worker).

New York leads the pack here. The yearly outlay is put at just over $24,000. But even the 15-city average of $17,500 is pretty hefty.

One hopeful sign: Office vacancies in many cities are very high, suggesting that some negotiation may be possible. Cities with the highest vacancy rates include Denver (26%), Phoenix (20%), Houston (19%), Atlanta (15.5%), Seattle (14.5%), and Kansas City (13%). New York's low 6% rate is one reason why prime space costs in that city are so high.

The high cost of office space

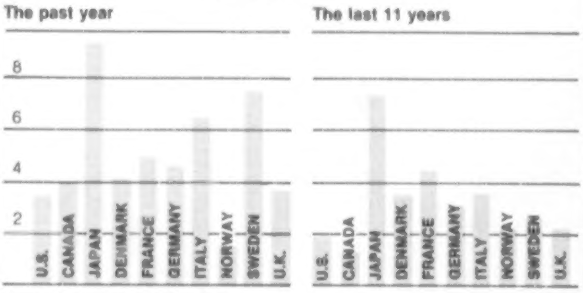
(Rental rate/square foot in new buildings)



Source: Howard Ecker & Co.

Factory productivity gains: An international comparison

(Average annual gain)



Source: Bureau of Labor Statistics

Nippon leads league, U.S. way behind

The rest of the Free World is doing a much better job of producing than the U.S. That's one of the major reasons domestic producers are having so much trouble competing.

Granted, our side did rack up a 3.5% productivity gain last year, but that was still poor performance compared to our trading partners. Japan led the list with a 9.5% increase, followed by Sweden (6.8%), Italy (6.3%), France (5.0%), Germany (4.7%), Canada (4.0%), and the U.K. (3.9%).

A recent Labor Department study suggests this is indicative of a long-term trend in which other Free World nations will continue to outpace the U.S. For example, over the last 11 years, the 2% U.S. average annual productivity increase looks puny compared to Japan (7.3%), France (4.6%), Italy (3.7%), and Germany (3.5%).

These greater efficiency gains—plus a strong dollar—have more than offset the fact that our average pay hikes have generally tended to lag behind those of most other industrial nations. That's why U.S. unit labor costs *vis a vis* the rest of the world look pretty bad.

Last year, for example, U.S. unit labor costs remained unchanged, while they fell significantly in all competing nations—with these declines noted (in U.S. dollars): Germany (–11%), Italy (–10%), France (–10%), U.K. (–8%), Canada (–7%), and Japan (–6%).

In light of these declines in unit labor costs, it's not difficult to understand why imports are such a problem in the U.S. And 1985 performance promises no dramatic reversal in the above trend.

What this means is that continuing overseas competitive gains will push our import total to new highs, probably something near $130-$140 billion—20-30% above last year's levels.

CURRENT PRICES

No bangs, just a few whimpers

Industrial prices continue to mark time as current readings disclose only a one-half percent increase over last summer's figures. Offsetting trends in individual product lines are holding averages pretty much at month-ago levels.

And there isn't any near term change anticipated as raw material averages (usually the first sector to feel any shift in the inflation climate) actually continue to drift lower—falling by almost 2% over the latest 30-day period.

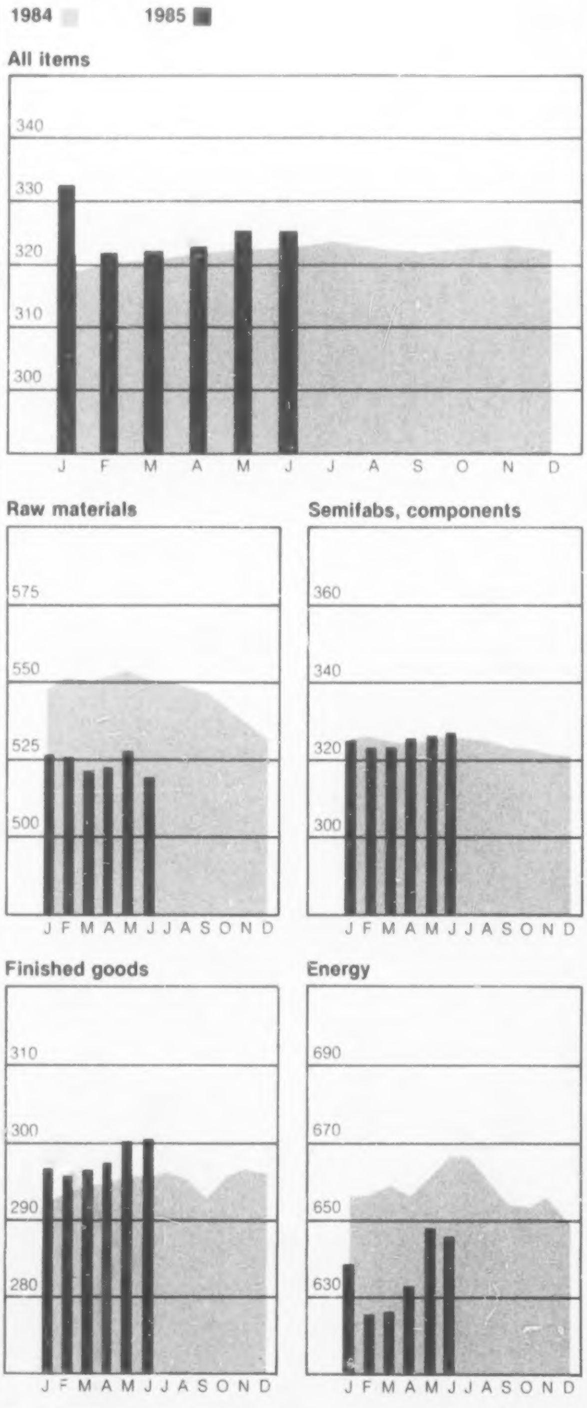
Also on an optimistic note is the downdrift in energy tags following an earlier runup. Even the advances in electricity and gasoline are now being more than offset by declines in home heating oil,

This month's breakdown

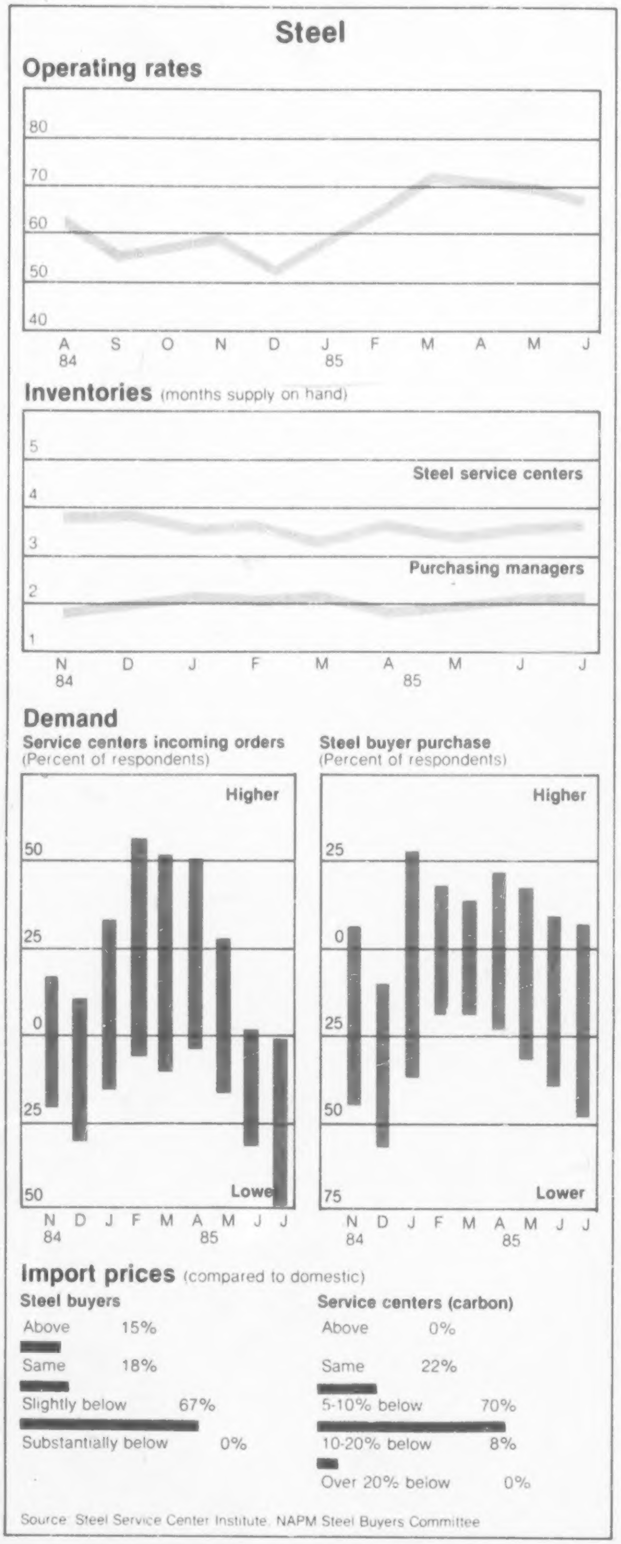
	Latest level (June)	% change from: Month ago	Year ago
Bearings	353.7	1.9	4.0
Bolts, nuts, etc	276.6	0.5	−0.9
Chemicals, inorganic	299.2	−0.1	2.6
Chemicals, organic	353.6	0.9	−4.8
Concrete products	321.5	0.4	3.7
Corrugated cartons	276.2	−1.6	5.0
Cutting tools, small	285.4	−0.1	2.0
Electric lamps (bulbs)	344.2	0.0	1.1
Electronic components	198.8	0.1	3.1
Fans and blowers	359.2	0.1	2.5
Foundry and forge products	362.7	0.0	0.3
Fuel oil (residual)	995.5	−6.0	−12.6
Furniture, commercial	307.1	0.4	3.4
Gasoline	587.8	1.9	0.7
Glass, flat	221.3	−0.2	−2.2
Glass containers	374.4	0.6	2.6
Gypsum products	338.1	6.5	−6.2
Hand tools	373.8	0.0	4.5
Hand tools, power driven	231.3	−0.2	4.8
Industrial furnaces	384.7	0.1	2.8
Integrating and measuring instruments	233.1	0.0	1.7
Internal combustion engines	347.7	0.0	2.7
Lubricating oil	770.7	0.0	−3.4
Lumber millwork	312.3	0.5	2.3
Material handling equipment	294.9	0.1	2.1
Metal containers	358.2	0.0	2.9
Metal mill shapes (nonferrous)	312.6	−0.9	−4.3
Metal tanks	305.2	0.0	0.0
Motors and generators	352.0	0.0	3.5
Motor trucks	293.3	−0.7	3.8
Office and store equipment	155.0	0.1	0.6
Paperboard	276.2	−2.1	−1.0
Paper boxes and shipping containers	273.7	0.0	4.2
Paper office supplies	239.9	0.0	−1.9
Paint	278.0	0.1	2.6
Plastic resins	309.1	0.9	−0.6
Precision measuring tools	263.3	−0.3	3.9
Pumps and compressors	356.1	0.2	1.8
Refractories	372.3	0.0	2.9
Rubber belts and belting	355.5	0.0	0.9
Scales and balances	229.4	0.1	−0.8
Steel products	364.5	−0.1	0.6
Switchgear	276.2	−0.3	−0.4
Textiles, synthetic fibers	156.6	−0.4	−2.4
Textiles, gray fabrics	151.7	−0.4	−1.7
Tires and tubes	237.7	−0.8	−2.2
Transformers and power regulators	232.6	0.3	1.8
Welding equipment	293.0	0.0	1.9
Wire and cable	202.8	−0.7	−0.2

Industrial prices

(Index: 1967 = 100)



Source: Bureau of Labor Statistics



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

residual fuel, liquid petroleum gas, natural gas, diesel fuel, kerosene, and crude petroleum.

Other soft areas, according to the Bureau of Labor Statistics, include textiles (where both manmade fibers and grey goods fell last month), tires and tubes, corrugated cartons, and most nonferrous metals, including aluminum, copper, zinc, and lead. Steel also remains weak.

Higher quotes were reported in organic chemicals and plastic resins which are both up a full percentage point over the last month.

Building materials were also relatively strong, reflecting good housing demand. Increases were noted in concrete products, gypsum, softwood lumber, millwork, sand and gravel, and paving mixtures—more than enough to offset easing in plywood, plastic construction products, and asphalt felting.

Capital goods are also edging up, although the overall average advance of 0.4% (3.6% at annual rate) can hardly be called earth-shaking. On the upside are plastics industry machinery, agriculture machinery, aircraft, and commercial furniture.

STEEL SCENE

Steel in the doldrums

The summer lull is taking its toll on steel—demand is likely to remain relatively depressed for at least another few months.

Take a look at some of the near-term projections being made by steel service centers and metal buyers. On the buying front, some 47% of those responding to the latest NAPM steel survey expect to cut their steel receipts over the next three months—the biggest such percentage in years. And at the other end of the spectrum, the 7% looking to increase orders is the smallest such figure in years.

Distributors tell much the same story. Nearly half those responding to the latest Steel Service Center Institute (SSCI) survey say they expect a decrease in their incoming orders over the next few months—and the remainder seeing little change from recent levels.

Even more significant is the fact that not one single service center contemplates an increase over the summer months. You have to go way back to find this kind of reading.

Despite this, Andrew G. Sharkey, SSCI president, remains basically bullish—noting that his group continues to hold an optimistic outlook for the balance of 1985.

Another factor adding to distributors' cautious optimism could be the trend toward just-in-time deliveries. Steel service centers, with their emphasis on speedy service, are well positioned to capture a greater share of the overall steel market.

Other key steel trends:

- **Inventories:** Stocks have moved up fractionally on a months' supply basis

...continued on page 48

BUSINESS DATATRAK

...continued from page 29

over the latest 30-day period, primarily because of summer factory slowdowns. By and large, metal holdings are in pretty good shape—with months' supply for both distributors and buyers still significantly under year-earlier levels.

Both groups would like to see their stocks reduced further.

- **Availability:** As might be expected, the current demand lull and ample capacity are creating a comfortable situation. Buyers, for example, do not see a single item on the problem list. Distributors have only isolated fears—and none involve the "bread and butter" steel items.
- **Imports:** Overseas bargains persist despite the recent imposition of tonnage quotas. Indeed, service center responses seem to suggest that domestic-foreign price differentials are actually widening. Thus 8% put the foreign carbon steel price advantage in the 11-20%—double the 4% reading of the previous month. And in stainless, some 23% cite 11-20% price advantages—again well over last month's reading.

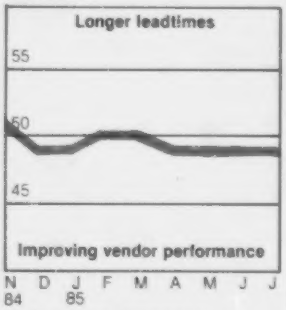
But things could change soon because of import quotas. Both buyers and service centers feel that they will be less dependent on foreign steel over the next six months—by a 2:1 margin in the case of buyers and a much bigger margin for distributors.

This trend toward more domestic dependence ties in with current steel import projections. Thus while imports in the second quarter accounted for about 23% of total U.S. consumption, the figure is expected to drop to near 20-21% by late in the year.

Monthly procurement status report

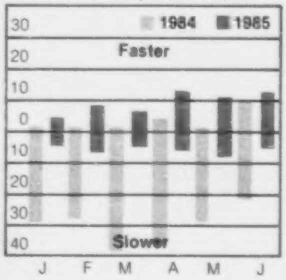
Leadtime index

A "diffusion" index based on 158 key commodities. Avove "50" indicates a tendency for leadtimes to stretch out. Below "50" suggests improving vendor performance.

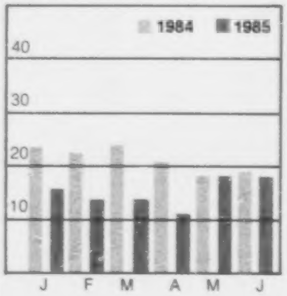


Delivery performance

(Percent reporting deliveries)

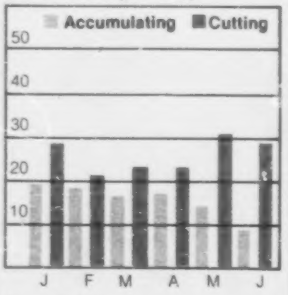


Forward commitments



Inventory strategy

(Percent of respondents)



Source: NAPM

PROCUREMENT STATUS

Smile, you're still in the driver's seat

Add another month to one of the longest buyers' markets in postwar history.

Virtually every industry is currently operating enough under its preferred levels to keep competitive pressures strong.

The latest NAMP Business Survey Committee report bears this out. Close to 25% of purchasing managers responding to the survey noted lower prices—two and a half times the number being socked with higher tags. This is the seventh consecutive month declines have predominated.

Declines have been reported in linerboard, corrugated containers, fuel oil, steel, aluminum, natural gas, and integrated circuits over the last month.

Prices aren't the only indication of today's soft markets. *PW*'s exclusive leadtime index continues at the neutral 50 mark for the fourth straight month—suggesting that lead times, on average, are still shrinking.

These shorter waits are also confirmed by NAPM's latest speed-of-delivery results: 13% experienced speedups over the recent month while only 5% noted slowdowns. The pattern has been the same for nine months now.

It is not surprising that PMs are starting to buy more and more on a hand-to-mouth basis. Some 15% of queried buying executives now say they are doing so for production materials. This is the highest such number in almost 2½ years.

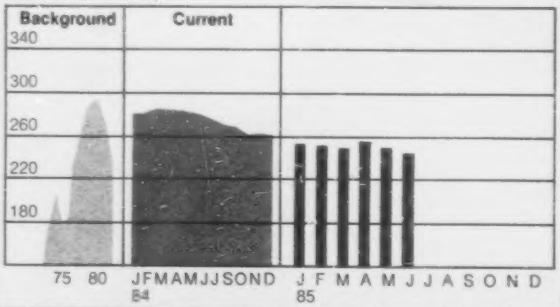
This helps explain the trend toward leaner inventories. And 29% of surveyed buyers say they are now paring stocks—more than three times the 9% who report higher holdings.

Confirmation of this comes from nearly half the *PW* readers responding to a new survey.

Raw material price barometer

(Index: 1967 = 100)

Latest month	**243.9**
Month before	**252.0**
Year ago	**286.2**



New toys in your electronic future

James A. Lorincz,
editor-in-chief

If you thought that decision making in purchasing in high-tech industries was going to get easier, forget that thought.

Almost nothing in the future of technological development suggests that, says Jerry Wasserman, vice president, Arthur D. Little Inc., Cambridge, MA.

Wasserman believes that the long-term implications of new technologies include increased risk and accelerated obsolescence and will require a high level of continuing education and long range planning. If anything, more participation at every level of the corporation in decision making will be important.

Here's what purchasing management can expect corporate management to be talking about in the area of new product capabilities in the near future.

Where the action will be

The accompanying charts tell the tale in the three markets Wasserman singles out for their exceptional potential: 1) information products; 2) biomedical products; 3) artificial intelligence.

Perhaps the key question today in information products is What constitutes the integrated office? Answers to that question are changing the direction of growth dramatically. By 1989, Wasserman says that it will be a $110 billion OEM market with peripherals replacing software as the fastest growing segment.

Wasserman's Rule of Thumb in evaluating software: If it takes someone more than a half hour to learn the software, forget it.

In the biomedical sphere, such developments as non-invasive surgery, artificial organs, nutrient implants, and self-testing diagnostic kits will spur growth. However, he believes that generally the Japanese are ahead of U.S. manufacturers in equipment and instrumentation.

The learning curve

Artificial intelligence is another story. The U.S. holds a slim lead of 18 months to 2 years over the Japanese in the field.

What is intelligence? According to Wasserman the best test is the blindfold test. If you close your eyes and are unable to determine if something was done by a machine or a person, that's intelligence. Computers, for example, must be able to do more than just calculate; they must be able to learn from experience.

The development of expert systems that provide systematic computer-based evaluation of everything from investment portfolio decisions and medical diagnosis to crisis management on the production line already exist. Gould is building such a crisis management system for GM's Saturn plant, for example. Typically such expert systems take several years to write and debug, he says.

An interesting twist in the development of the industry that is growing up around artificial intelligence is that high-tech personnel like engineers, software programmers, and other techies will be far less in demand than people-oriented professionals like psychologists, sociologists, behaviorial scientists, and Ph.Ds in other related fields. ***PW***

Bio medical

U.S. market revenues ($millions)

	1984	1989	Growth rate %
Medical lasers	80	275	28
Coronary angioplasty	35	90	20
Artificial organs	750	1100	8
Medical nutrition	360	620	11
Over-the-counter Diagnostics	145	380	21
Total	1370	2465	11

Information products

U.S. market revenues ($billions)

	1984	1989	Growth rate (%)
Computers	25	36	8
Terminals	9	14	8
Peripherals	21	40	14
Software	7.5	20	21
Total	63	110	12

Artificial intelligence

Revenue ($billion)

	AI	Computer Industry	Percent of total
1984	0.15	150	0.1
1985	0.25	160	0.15
1990	12	265	4.5
1995	65	350	18.5
2000	115	420	27.4

Artificial intelligence

Number of people

	AI Workers	Computer Industry (million)	Percent of total
1985	2,600	1.8	0.14
1990	100,000	2.3	4.3
1995	475,000	2.5	19.0
2000	650,000	2.5	26.0

PurchasingWorld

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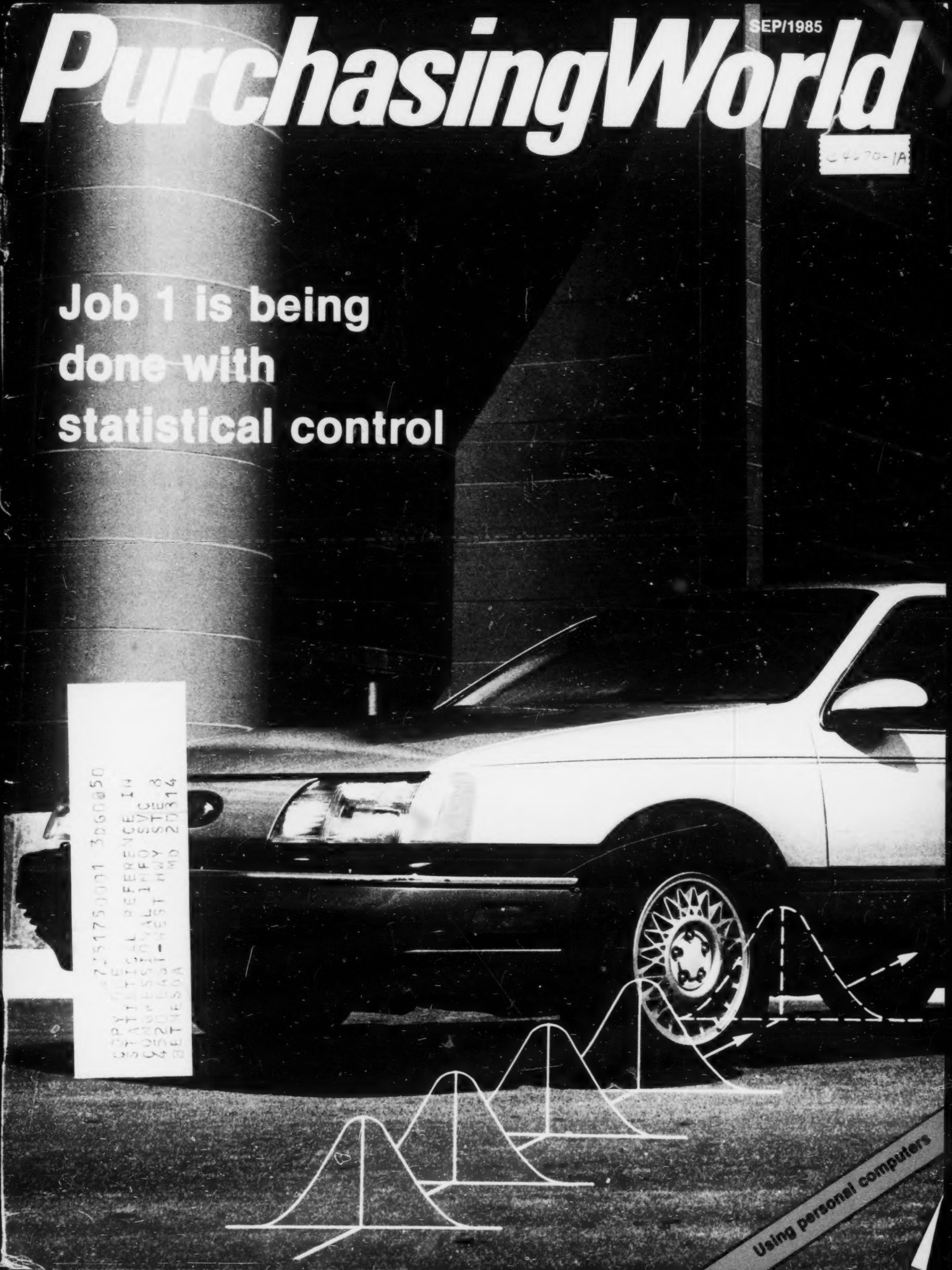
Job 1 is being done with statistical control



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Using personal computers

PurchasingWorld

Helping you manage the business of buying

Vol. 29 No. 9-September 1985

Features

34 Job 1 is being done with statistical control methods
Quality doesn't just happen. Really it is a systematic—and statistical—approach to preventing non-conforming product or service from happening. That philosophy has taken hold at Ford Motor Company which has invited its suppliers to join in Ford's "never-ending improvement" in the quality of its products and the productivity of its manufacturing operations through the use of statistical process control methods.

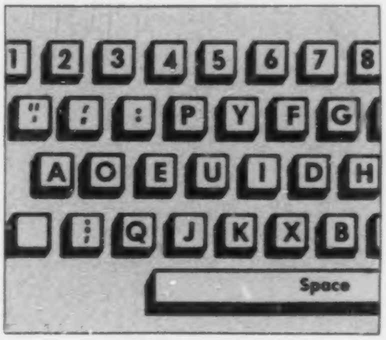
43 PW Office '85
Change the keyboard on your basic typewriter? Well, if the U.S. government, the Army, and a bunch of others who are studying the Dvorak method of placing all the frequently used vowels and consonants on the home row adopt it, it could happen. No, it's not a new idea, but you'll find a lot of other ones on this month's office page.

46 Justifying the PC buy
What a great idea. Using personal computers in purchasing. It's an idea whose time is long overdue. Speaking of timely, here's a new series on the very subject by purchasing pro Jeff Pinkerton, who is director of corporate purchasing at American Standard Inc., New York. Next month's installment of Pinkerton on PCs will tell you how to set your PC up.

58 Putting 'risk of loss' right
According to Dr. John E. Murray Jr. the characterization of a contract for the sale of goods as either a "shipment" or as a "destination" contract can make a great deal of difference in determining who has liability in the event of loss.

66 EDI update
Eastman Kodak recently invited 50 of its largest vendors in to learn about how the firm is going to use electronic data interchange (EDI) to replace paper in purchasing transactions. As you might guess, there was 100% attendance.

Cover photo: That's Ford's new Taurus on our cover. Ford asked for and got greater supplier involvement in design of parts. It is also asking suppliers for and getting better quality and productivity through the use of statistical process controls.



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BUYER OF THE YEAR

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PW PREDICTS

Robert S. Reichard, executive editor

No crisis in prices

The upcoming fourth quarter is looking as though it will follow the same pattern as the last few months: scattered price boosting attempts with many of them failing to hold as buyers continue to call the shots.

Trends seem to confirm this. For example, almost one out of five (19% to be exact) of the purchasing managers surveyed by NAPM's Business Committee reported lower prices last month—almost double the 10% who reported increases. This marks the eighth consecutive month that lower prices have predominated. Reductions have been noted over the last 30 days in such key product lines as aluminum, copper, hot rolled steel sheets, fuel oil, coal, gasoline, and corrugated shipping containers.

The reasons behind all this easiness remain basically the same: (1) more-than-ample capacity, with the nation's factories operating at about 80%—well under preferred levels; (2) weak demand in most areas as real GNP advances fall under previously projected levels; (3) surprisingly modest cost pressures; and (4) continued strong competition.

Also, there doesn't seem to be anything to fear from continuing dollar softness. Most foreign firms only partially passed along the savings stemming from the 1984-85 dollar runup, thereby giving them ample room to absorb current and future currency softness. Point to keep in mind: Recent studies suggest the dollar would have to fall another 15-20% to cause any appreciable acceleration in the overall price level.

Also, on an optimistic note, cost pressures are likely to remain subdued. For example, energy tabs are being held in check by shaky oil. The same is true of the cost of money as the prime rate continues to hold under 10%.

Wage rate gains have also continued to hold in the relatively moderate range—current figures are running only about 4-5% above a year ago.

Perhaps the most encouraging sign of all is the revised price forecast by the Federal Reserve Board—an agency that has in the past seen inflationary demons lurking everywhere. Despite nearly three years of uninterrupted business gains, the nation's money managers feel that overall prices (as measured by the GNP deflator) will rise at only a 3.75-4.75% rate through the end of 1985.

But there could be some problems over the long pull. For one, productivity gains are now not nearly as robust as they were last year. And even with continuing low pay increases, this could mean a 1-2% acceleration in unit labor costs over the next 12 months or so.

A growing profit squeeze in some product lines could also cause some uptick in the overall inflation rate over the long term. This would certainly seem to be the case in such severely depressed areas as steel and nonferrous metals. Declines here have generally been in the double-digit range over the last few years, suggesting that boosts in these sectors are likely to be fairly substantial when supply and demand factors come into better balance (as they ultimately must).

Robotic markets

Figure on prices of industrial robot systems falling about 3.1% a year over the 1985-90 period.

This new projection, made by Henderson Ventures, suggests that the average tab for a system (the basic mechanical unit, controller, software, and accessories) will run about $50,700 by 1990, down about $8,400 under current levels.

The California-based electronics consulting firm sees this as a result of several conflicting price trends:

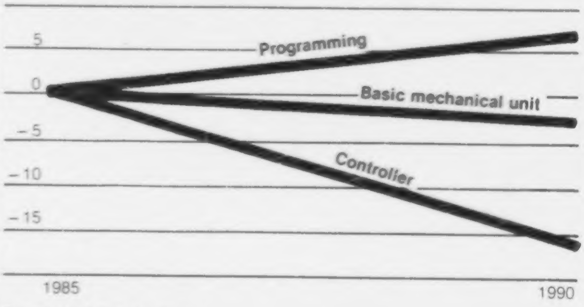
- The portion of the price represented by the basic unit is expected to decrease by about the same percentage as the overall system, primarily because it is the most costly part, accounting for over 60% of the total outlay.
- The price of the microprocessor-based controller (including RAM, input devices, communications, and secondary storage) should fall at an average annual rate of 16%.
- The price of robotics programming languages should increase more than 7% a year as greater functionality is introduced, such as knowledge representation and inference mechanisms.

The new study also estimates world sales (in current dollars) will rise about 25% annually—from $1.6 billion currently to near $5 billion by 1990.

U.S. production, viewed separately, should grow at a somewhat faster 28% rate. But the Japanese are still expected to command 56% of the world market by 1990.

Industrial robotic systems

(Average annual price change, 1985-90)



Source: Henderson Ventures

Plastic resins

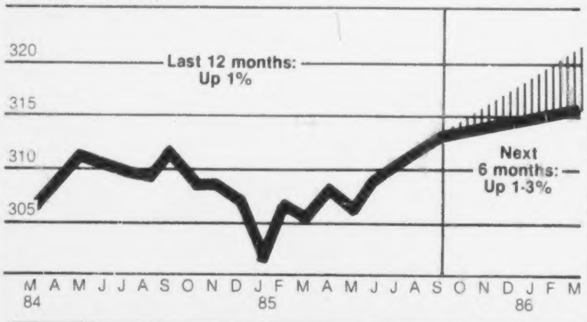
CURRENT SITUATION: Prices are moving up from recent lows. Not all of the posted hikes are sticking, but enough have to boost average tags about 2.5% since March. Behind the modest pickup: a combination of rising feedstock costs (in benzene, styrene, and vinyl chloride) and slowly improving demand. **Year-to-date domestic sales are running 3-4% ahead of last year. Exports have also picked up lately**—especially in polyethylene and polypropylene—aided by a tighter European supply situation.

DEMAND: The recent pickup could accelerate a bit—with the total thermoplastic advance for 1985 as a whole now put near 6%. But there could be some significant plastic-by-plastic differentials—with these individual changes (*vis-a-vis* 1984) anticipated: LDPE (+8%), HDPE (+9%), PP (+10%), PS (+7%), PVC (−3%), and ABS (−2%). **A preliminary forecast for 1986 suggests more even performance, with all resins moving up in the 3-5% range.**

SUPPLY: No problems anywhere. True, two of the resins (HDPE and PP) are now operating in the 90%+ range. But producers in both these areas are having trouble boosting prices. The markets are even easier in PVC, PS, and ABS where operating rates remain in the low 70-80% range. Next year, however, could see some modest tightening, as 3-5% increases in overall demand are only partially offset by a 1% boost in capacity.

PRICE OUTLOOK: Slowly improving supply/demand balance suggests a rise in most resins. But advances will be modest and gradual, held down by still-ample capacity, a possible weakening in feedstock costs if crude oil continues to fall, and improved technologies (especially in PE). **Overall, budget for about a 1-3% increase by early 1986—enough to boost the transaction price on most of these resins by about 1-2¢/lb.**

Plastic resin prices
(Index: 1967 = 100)



Textiles

Markets may be ready to bottom out. Denim has moved up 25¢/yard from spring levels (to $2.75-2.80/square yard on the 14.5 oz heavyweight 60 in. grade)—with another 5% boost possible by year-end. Other signs of strength would have to include (1) a pickup in interest in heavyweight apparel grey goods and (2) some modest gains in purchases of polyester/cotton print cloths and industrial grey goods.

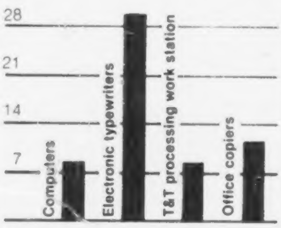
Semiconductors

High OEM inventories, especially in the communications, office, and computer equipment sectors continue to put downward pressure on demand and prices. On the latter score, buyers believe that quotes will edge still lower. As for demand, continuing low book-to-bill ratios (around 0.7) tell the story. These negative readings have completely exhausted backlogs of semiconductor manufacturers, forcing downward revisions in sales estimates. The Semiconductor Industry Association predicts that U.S. billings will decline more than 20% this year.

Office equipment

Demand for computers, typewriters, and office copiers will outpace overall economic growth by a wide margin, according to the Computer and Business Equipment Manufacturers Association (CBEMA). This year, computer and related equipment sales are expected to rise 8%; office copiers should be up by an even larger 10%; electronic typewriters should advance a hefty 30%. The latter, of course, is aided by phasing out of electric typewriters. Sales of text processing workstations (units with memories of 20K or more) will also show a big 8% advance.

Office Equipment
(% increase in demand 85/84)



Computers

Don't be surprised if Apple IIc models (now priced at $1,295) fall to well under $1,000. More expensive PCs are also facing additional competition as more manufacturers unveil IBM-compatible desktop machines. Thus (1) Wang has introduced a new Advanced Professional model that's faster than IBM's PC AT, yet sells for $500 less and (2) Data General's new Dasher/One workstation has a base price of only $2,100 when used as a PC. And going further up the computer ladder, both faster and cheaper superminicomputers are coming onstream—types that pro-

PW PREDICTS

Energy

CURRENT SITUATION: Another relatively inflation-free year seems all but assured. The overall trend this past year has actually been down, with oil leading the way. At latest report refined petroleum product prices were off some 4% from year-ago levels. Natural gas (down 2%) and coal (up 0.5%) have also behaved well. Electricity has been moving up, but by only 3% in the last 12 months.

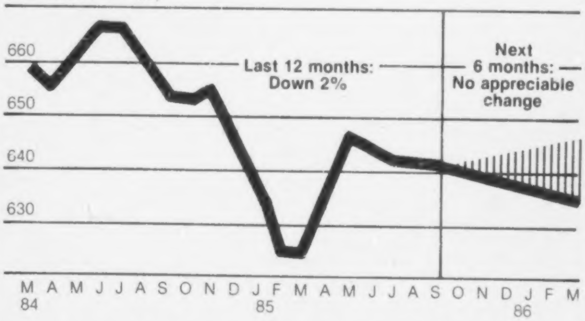
DEMAND: Overall energy consumption this year should be only about 2% over last year—slightly under the comparable GNP advance. Behind the declining energy/GNP ratio: (1) continuation of the conservation trend started during in the early 1970s, (2) improving technology, and (3) a changing product manufacturing mix that require less energy. **The demand decline is most apparent for oil** where 1985 domestic use is expected to rise only about 0.5%. Coal is expected to rise by only 2%. **The only big increase is seen in nuclear energy where a 10% gain is expected.** Demand for electricity is expected to be up only about 3%.

SUPPLY: There is more than enough of everything to go around. This is especially true of oil where cheating on quotas by OPEC producers, plus the still-rising, non-OPEC output has made for a king-sized glut. A similar market imbalance is also evident in natural gas and coal. **Electricity seems more than ample. Even a DOE spokesman sees the surplus lasting for another 5-10 years.**

PRICE OUTLOOK: Expect little or no long term change in overall averages as boosts in electricity rates (2-3% at annual rate) are offset by easiness in other areas. And another $1-2/bbl crude oil drop can't be ruled out as OPEC's power continues to wane.

Fuel and power prices

(Index: 1967 = 100)



vide much of the computer power of super computers at a far lower cost.

Propylene

Prices are under pressure. Reason: Supplies are beginning to mount, reflecting the easing of refinery grade material for octane enhancement. Shop around and big orders can be nailed down for as little as 14.25-14.50¢/lb for the chemical grade—about 1¢/lb under levels prevailing as recently as early May. Polymer grade material isn't all that firm either. The current 16.25-16.50¢/lb quote runs well under the 18¢/lb prevailing during the early part of the year.

Maleic anhydride

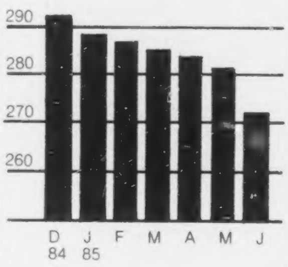
Markets are quite bullish reflecting (1) strong demand which is expected to run about 4-5% above 1984 levels and (2) operating rates in the 90% range. True, some discounting still exists, but it has been lessening in recent weeks. Another sign of firmness: the new 3¢/lb increase in list prices, bringing quotes to 53¢/lb for molten materials and 65¢/lb for briquettes.

Paper and board

Prices remain weak. True, one firm is trying for a $320/ton linerboard quote. But it is doubtful whether such a boost over the recent low $265/ton price will hold. In any event, corrugated box prices remain under pressure. Coated papers, too, seem about to peak—and a newsprint increase, originally scheduled for April 1, looks all but dead for the rest of the year. On a more bullish note, the combination of reduced imports and a drop in customer inventories are lending some firmness to previously soft uncoated white papers—as about half of a recently posted $60/ton increase sticks.

Paperboard prices

(Index: 1967 = 100)



Chlor-alkalis

The recent $10/ton increase in chlorine has failed to hold—with market prices still quoted at pre-hike $110-125/ton levels. Behind the softness: falling PVC demand plus the fact that some of the small and medium-sized producers continued to sell at the old price. Caustic soda has also been soft, reflecting reduced pulp and paper demand. Prices of the alkali are now said to be in the $105-115/ton range, some $5-10/ton under recent levels. Imports have been hurting caustic, too. Another sign of overall easiness: projected 1985

PW PREDICTS

Pollution control spending

Be prepared to shell out lots of cash for pollution control equipment.

All told, 1985 outlays could reach $10.5 billion—only fractionally less than last year and the equivalent of about 2.7% of the year's total plant and equipment spending bill. In some industries, the percentage of capital investment earmarked for cleaning up the country runs upwards of 5%.

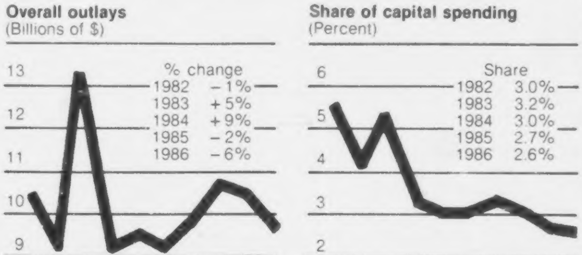
The continued big spending estimates come as a bit of a surprise in view of Washington's opposition to new environmental legislation.

Here's a more detailed rundown of what seems to be shaping up in this key sector, according to a new McGraw-Hill survey of over 400 leading U.S. firms:

- Biggest 1985 spenders will again be public utilities ($2.2 billion), petroleum ($1.8 billion), mining ($1.2 billion), and chemicals ($1.0 billion). Together, these account for nearly 60% of total spending.
- In terms of percentage gains over last year, the leaders are automotive (87%), stone, clay, and glass (64%), chemicals (28%), petroleum (27%), nonelectric machinery (23%), instruments (22%), and steel (20%).
- Industries with the biggest portion of their capital spending bills going for pollution gear include mining (10.3%), chemicals (6.8%), and electric utilities (5.5%).
- An increasingly large portion of the pollution fighting dollar will go to solid waste (20% this year and 23% next year, vs only 18% last year). But air (45%) and water (34%) will still command the biggest shares this year.

One long-term change noted by the survey: While dollar totals remain high, the percentage of the capital spending dollars earmarked for this function has been declining. The current 2.7% share is less than half of 1976 figure of 5.6%.

Pollution control spending levels off



Source: McGraw-Hill

advances of just 2% for caustic and an even smaller 1% for chlorine.

Ethylene

The recent 1-2¢/lb increase has washed out with prices remaining in the bargain basement 14.75-15¢/lb range. Behind the softness: relatively high consumer inventories and easing feedstock costs. On the latter score, ethane has been dropping and is now available at 21-21.5¢/gal. Also gas, oil, and naphtha (heavy feedstocks which still account for substantial amounts of ethylene) have been affected by recent declines in crude oil. Demand has been firm, but even here, seasonal easing would seem to rule out any further near-term price boosts.

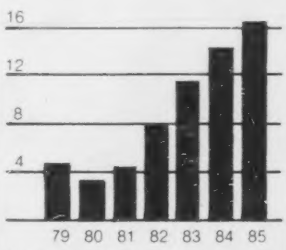
Packaging

Here's how the NAPM Packaging and Containers Committee views the near-term outlook: Cans—excess capacity with a flexible pricing environment. Glass—firm prices with buyers noting a "sellers'" market. Metal drums—soft prices. Folding cartons—shorter leadtimes, weak prices, and significant decrease in SBS tags. Corrugated—most linerboard prices below the $320/ton list. Bags—weak quotes due to a soft kraft paper market. Fiber cans—oil market losing out to plastics, although these can manufacturers are aggressively defending their turf.

Office space

It might pay to shop around before committing—as vacancy rates continue to climb. Latest 16.1% reading for downtown areas, for example, is more than two percentage points above 1984 averages. And latest levels are more than four times larger than in 1980. Suburban vacancies are even higher (currently averaging 19.7%). Cities with substantially higher than average downtown rates: Oklahoma City (25.8%), San Diego (25.4%), San Antonio (23.6%), Denver (23.6%), Miami (22.7%), New Orleans (22.6%), Phoenix (22%), and Houston (20.2%).

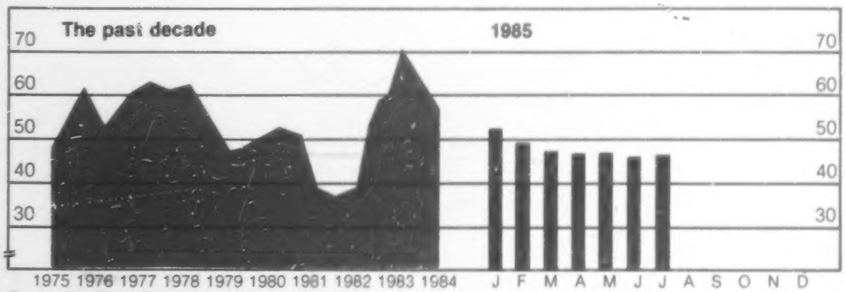
Office vacancy rates
(Percent)



Source: Coldwell Banker

PW Office '85 is alive with the news you need in office equipment technology.

BUSINESS DATATRAK

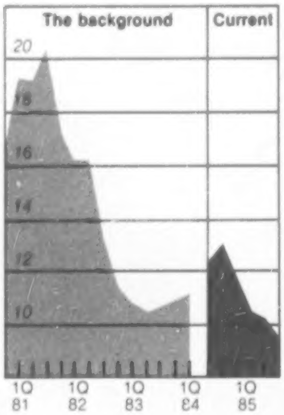


NAPM business barometer

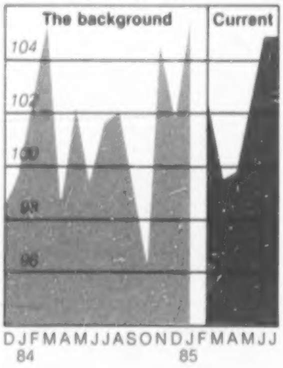
Based on five indicators (employment, inventories, new orders, production, vendor performance)

Source: Commerce Dept.

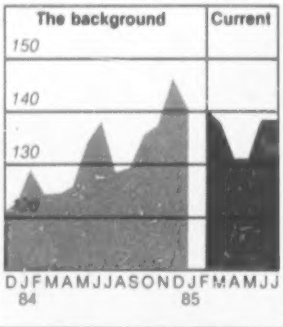
Leading indicators



1. Prime interest rate
(Percent)



2. Durable goods orders
(Billions of $, seas. adj.)



3. Help wanted
(Index: 1967 = 100)

KEY ECONOMIC TRENDS

Is there life after the first half?

The economy isn't taking off, but there are enough positive business indicators to suggest about a 3-4% annual rate of real GNP advance for the rest of the year.

One good sign: Industrial production, which has been moving irregularly sideways for more than a year, seems headed back into the plus column, with about a 2% annual rate of advance seen.

This forecast is based on several factors. For one, the inventory paring of the last few quarters finally seems to have run its course. The number of purchasing managers who expect to increase their holdings now outpolls those planning cutbacks.

This can't be underestimated. Other things being equal, a level-to-rising inventories trend means that any increase in final demand will be quickly translated into new production.

Then, too, there is the Fed's continuing relatively easy money policy making money easier and less expensive to borrow. This has to have a positive effect.

Note, for example, that the prime interest rate has dropped down into the single-digit range, falling some 3.5% under year-ago levels (see chart). And while the rates are not expected to fall much more, the current levels are certainly low enough to spark some pickup in both consumer and business buying.

These lower rates are already having an effect in the construction sector where slowly falling mortgage rates now point to about 1.9 million housing starts this year—up from last year's 1.8 million. Also of note: Nonresidential building has been very strong—with contract awards in this area rising at a 17% annual rate in the second quarter 1985.

But construction is not the only sector now solidly in the plus column. Defense spending continues to rise. And consumer outlays are also looking up, judging from the high level of family buying plans. A recent Conference Board survey, for example, shows 7.5% of the respondents thinking about buying a new auto and 28% a major appliance.

Businessmen also seem fairly confident. While this may not be enough to keep capital spending in a continued uptrend posture, it should at least keep these outlays on a relatively high plateau.

Put all the above pluses into the hopper and it's not all that surprising that durable goods orders have been rebounding from their early 1985 lows. While the figures don't indicate a boom, they do suggest at least a modest gain in factory output.

The employment picture also looks relatively good. The jobless rate remained unchanged in the 7% + range, but there are some indications that some modest improvement may be in offing.

The number of workers on nonfarm payrolls jumped 243,000 in July (seasonally adjusted)—significantly more than the second quarter's average of 180,000 gain. And help wanted advertising (a leading indicator of management's demand for labor) has moved up again in recent months.

This improving picture has also resulted in fewer gloom and doom predictions. In sharp contrast to a few months back, the majority of analysts and virtually all econometric models are now calling for continued growth in 1986—with average GNP advance put in the 2-3% range.

There's glee behind the gloom

Business leaders are still basically optimistic despite first half results which fell significantly under projected levels.

A new Dun & Bradstreet survey of 1,400 key executives, for example, shows that 74% expect third quarter sales to top year-earlier levels (see chart) which is not that much different from the 75% figure noted three months earlier.

The sales outlook is perhaps best summed up by D & B's sales optimism index (the percentage of firms expecting increases minus the percentage expecting declines). This yardstick is currently put at 68—a bit under 1984 peaks but still far above the 40 reading noted during the 1982 recession.

Other encouraging findings of the new survey:

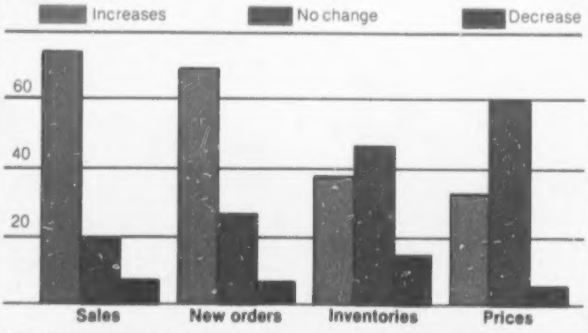
▪ **New orders:** The figures here are still quite impressive, with some 69% of the responding companies anticipating year-to-year gains during the current quarter—far outweighing the 5% who expect some decline.

▪ **Inventories:** Expectations for increases are down somewhat, indicating that business leaders are continuing to keep a tight rein on stocks despite their still optimistic sales projections. Specifically, only 39% now expect increases *vis-a-vis* a year ago, compared to 41% who felt that way three months ago. Also, the number of firms planning cuts has increased from 12% three months ago to 16% currently.

▪ **Prices:** The percentage of respondents looking for higher prices has fallen, with only about one in three putting third quarter levels above a year ago (vs. 41% three months ago). Some 60% say they see no change and 4% actually expect third quarter prices to drop under last year's level.

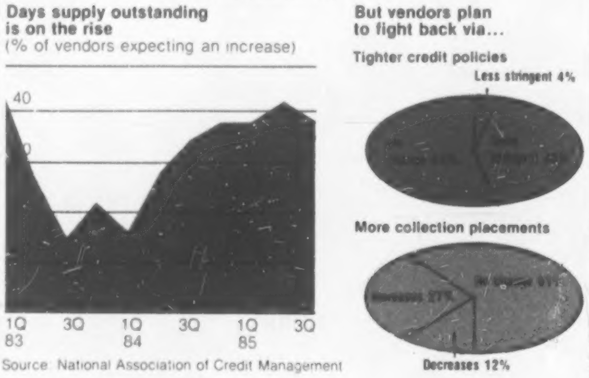
Businessmen remain bullish

(3rd qtr. '85 vs 3rd qtr. '84, % of respondents)



Source: Dun and Bradstreet

Accounts payable: A status report



Source: National Association of Credit Management

The check's in the mail

Thinking about paying your procurement bills more slowly? If so, you've got plenty of company, according to a new report just issued by the National Association of Credit Management (NACM).

Latest findings show that 37% of queried vendors now expect an increase in days sales outstanding over the next six months. While this is a bit under the 41% reading noted three months ago (see chart), the percentage is still far above 1983-84 readings.

Not surprising, some 13% of these vendors now label the payment problems as "serious"—with another 52% dubbing it "moderate." One out of every three respondents also noted that unauthorized discounts, deductions, and chargebacks are now either a serious or moderate problem.

But these same sellers are also beginning to do something to reverse these trends: Some 43% plan more stringent credit policies (outweighing the 4% who may ease up), and 27% are now contemplating an increase in the accounts they place for collection (vs. only 12% who see some decrease).

There could also be more use of service and interest charges on past-due accounts. Some 15% of queried vendors expect an increase in this approach (vs. only 10% who may cut back on this ploy).

Another study—by TRW—confirms the substantial number of past-due accounts. At latest report, 22.4% of all accounts monitored by TRW were past due, with 9.4% more than 31 days in arrears.

BUSINESS DATATRAK

CURRENT PRICES

Can there be still another month with no price movement?

Add still another month to the steady stream of near-zero movements in overall industrial prices. Latest levels are virtually unchanged from year-ago readings.

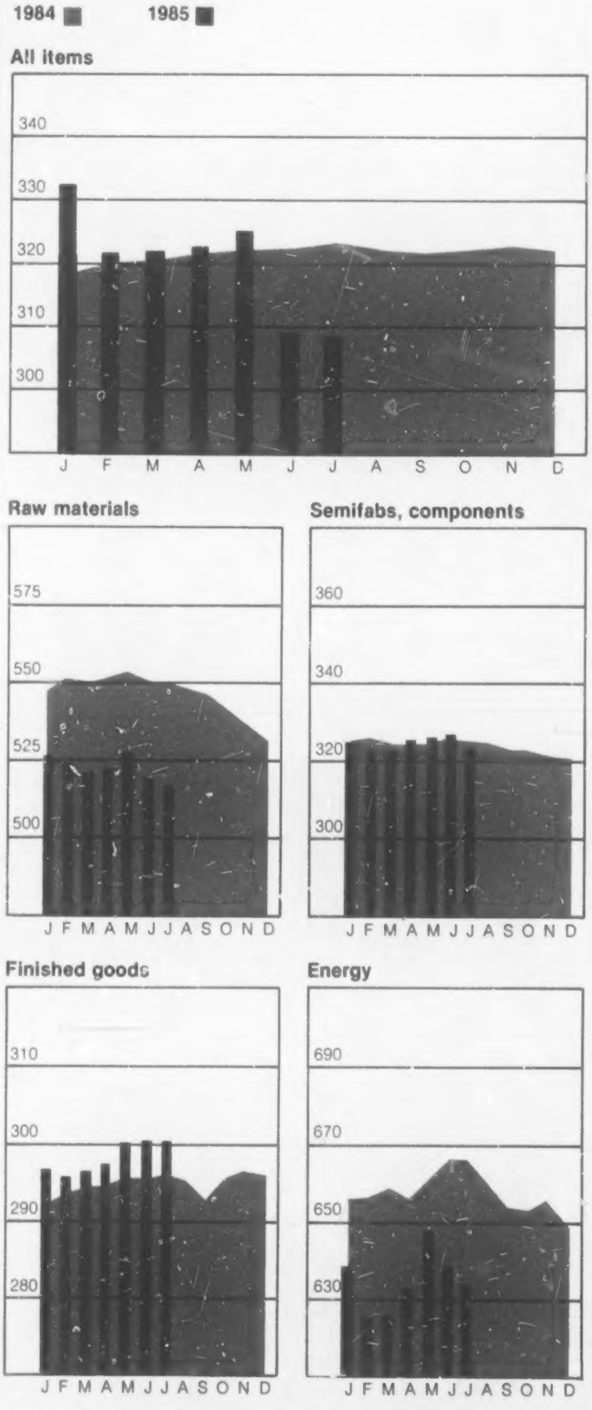
Credit the latest month's level reading to a combination of offsetting shifts. On the downside, for example, was a continuing across-the-board drop in energy tabs—with slippages noted for gasoline, home heating oil, natural gas, finished lubricants, kerosene, jet fuel, diesel fuel, and even electric power.

All told, this slide added up to nearly a 1% decline in fuel and power costs for the month—enough to

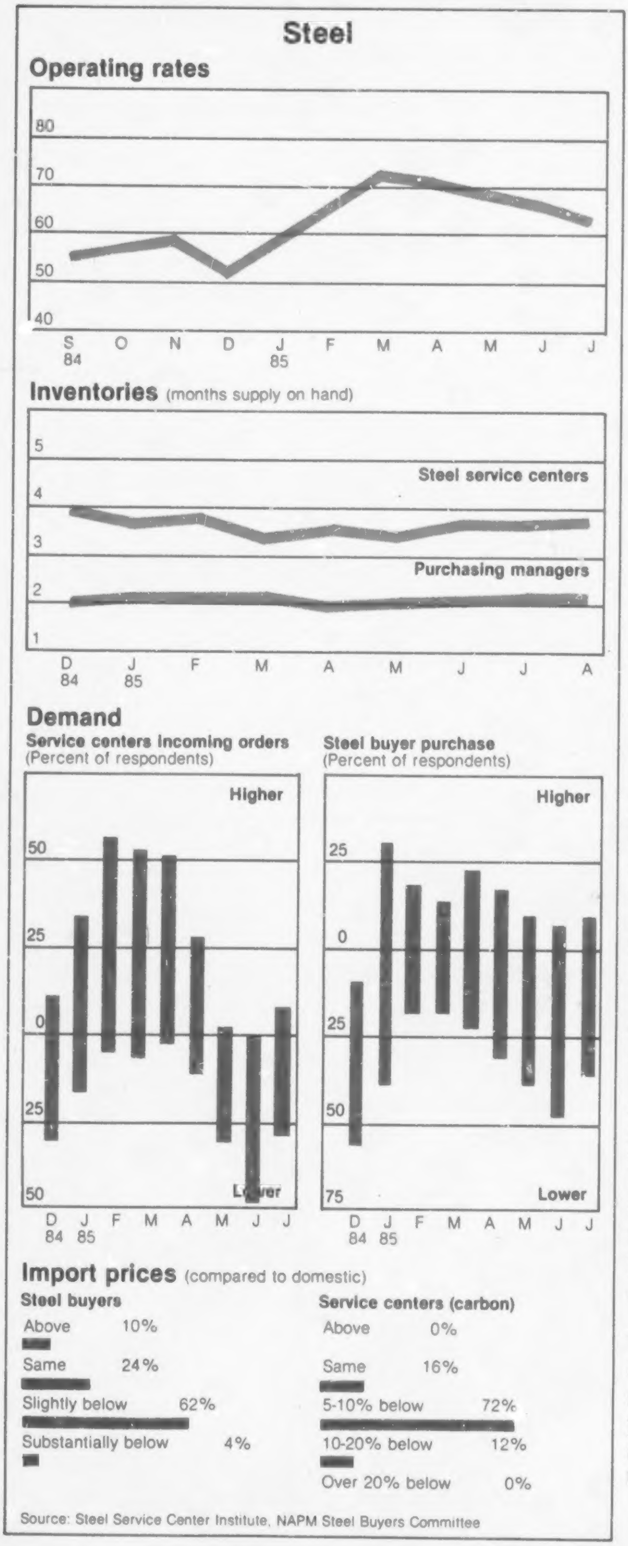
This month's breakdown

	Latest level (July)	% change from: Month ago	Year ago
Bearings	353.5	−0.1	3.0
Bolts, nuts, etc	278.0	0.5	0.0
Chemicals, inorganic	303.0	1.3	3.6
Chemicals, organic	351.0	−0.7	−5.4
Concrete products	321.1	−0.1	3.4
Corrugated cartons	270.5	−2.1	1.4
Cutting tools, small	285.4	0.0	2.0
Electric lamps (bulbs)	344.1	0.0	3.9
Electronic components	197.5	−0.7	1.6
Fans and blowers	359.7	0.1	2.5
Foundry and forge products	363.5	0.2	0.3
Fuel oil (residual)	300.2	0.7	−21.6
Furniture, commercial	308.6	0.5	3.5
Gasoline	588.4	−0.3	2.9
Glass, flat	222.8	0.7	−1.5
Glass containers	378.4	1.1	3.3
Gypsum products	338.6	0.1	−5.9
Hand tools	375.0	0.3	4.4
Hand tools, power driven	233.3	0.9	4.1
Industrial furnaces	385.1	0.1	2.8
Integrating and measuring instruments	231.6	−0.6	0.6
Internal combustion engines	347.2	−50.1	2.3
Lubricating oil	N.A.	N.A.	N.A.
Lumber millwork	314.5	0.5	2.3
Material handling equipment	295.4	0.2	2.0
Metal containers	358.1	0.0	2.9
Metal mill shapes (nonferrous)	307.4	−1.7	−4.8
Metal tanks	305.4	0.1	−0.3
Motors and generators	351.8	−0.1	3.3
Motor trucks	293.5	0.1	4.2
Office and store equipment	154.9	−0.1	0.8
Paperboard	273.2	−1.1	−2.1
Paper boxes and shipping containers	273.2	−0.2	−3.5
Paper office supplies	238.7	−0.5	−2.0
Paint	278.5	0.2	1.6
Plastic resins	308.0	−0.4	−0.8
Precision measuring tools	263.3	0.0	3.9
Pumps and compressors	356.4	0.1	1.8
Refractories	372.2	0.0	2.9
Rubber belts and belting	352.8	−0.8	0.8
Scales and balances	229.5	0.0	−0.6
Steel products	293.1	0.2	0.6
Switchgear	277.8	0.6	−0.4
Textiles, synthetic fibers	156.1	−0.3	−2.5
Textiles, gray fabrics	151.5	−0.1	−1.8
Tires and tubes	238.4	0.3	−2.1
Transformers and power regulators	231.1	−0.6	0.9
Welding equipment	291.7	−0.4	1.2
Wire and cable	204.0	0.6	1.2

Industrial prices
(Index: 1967 = 100)



Source: Bureau of Labor Statistics



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

drop overall energy averages a hefty 4.6% under year-earlier levels.

Basic materials continue fairly weak, too, with declines over the latest 30-day period noted in nonferrous metals, softwood lumber, industrial chemicals, paperboard, inedible fats and oils, paint materials, flat glass, and hides. These were more than enough to offset somewhat higher tags for plywood, wire and cable, wiring devices, tires and tubes, and ferrous scrap.

A similar tradeoff is also apparent in component parts—as drop-offs in electronic components, electric motors, and rubber belts and belting offset advances in glass containers, fasteners, and environmental controls.

Nor is the picture all that different in the machinery sector—as boosts in trucks, aircraft, commercial furniture, food machinery, and chemical equipment are pretty much balanced out by declines in transformers, railroad equipment, instruments, and oil and gas field machinery.

Perhaps the best indicator that things are still pretty much under control is the number of negative or "no change" readings in the detailed price table. Roughly one-half the items are now in the minus or neutral categories.

Point to keep in mind: You have to go back two decades or more to find so many vendors unable to post increases in what is still a basically upward-tilting economy.

STEEL SCENE

It's still a waiting game in nation's steel markets

Near-term steel markets still don't look all that robust. Granted, buyer and service center expectations for the next three months aren't quite as bleak as they were in early summer.

But the picture is still rather bearish. In the latest NAPM steel survey, some 35% of the PMs responding say they continue to plan on reduced purchases—far outweighing the 10% who feel some increase may be in order. And distributors responding to the latest Steel Service Center Institute Survey tell much the same story; 28% anticipate near-term declines vs. only 8% who see sales gains ahead.

This survey could reflect what SSCI president, Andrew G. Sharkey, calls a "a threefold apprehension" among members: 1) continuing concern about imports of steel-using manufactured goods; 2) lack of strength in the heavy industry sector; and 3) doubts about whether or not business will bounce back after the traditional summer slowdown.

Nevertheless, Sharkey remains basically optimistic, noting that if the trends of the first half continue, 1985 shipments should surpass last year's record of 21 million tons.

Steel markets, meantime, continue to show signs of uncertainty and some underlying softness. Big-volume buyers, for example, are getting an additional $15-25/ton discount on fourth quarter flat-rolled products.

Even the mills are cautious about fourth quarter shipment levels. Right now, for instance, the betting is that only about 19-19.5 million tons will clear the market over the last three months of the year.

One of the factors behind the lackluster demand outlook—aside from consumption—is the desire to reduce inventories. So far this year, users have pared about 500,000 tons from their stocks and are still not satisfied.

Service centers are equally cautious about inventories. In this case, an even bigger two-thirds of the respondents feel their stocks are too high and are planning further cutbacks.

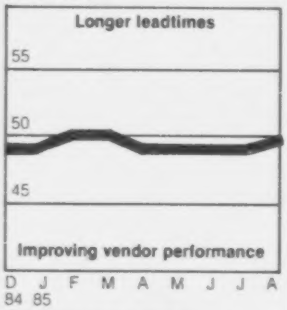
Another factor both groups agree on: There are still import bargains to be had, despite more than six months of quotas. Two out of three buyers say they can get imported steel under comparable domestic levels.

Perhaps the best indication of this import competition is the failure of incoming shipments to drop as much as had been predicted earlier when quotas were first imposed. Right now, for example, as much as five million tons could come in during the last quarter—enough to push the year's total to nearly 23 million tons, about 23.5% of the domestic market.

Monthly procurement status report

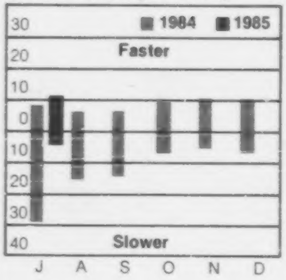
Leadtime index

A "diffusion" index based on 158 key commodities. Avove "50" indicates a tendency for leadtimes to stretch out. Below "50" suggests improving vendor performance.

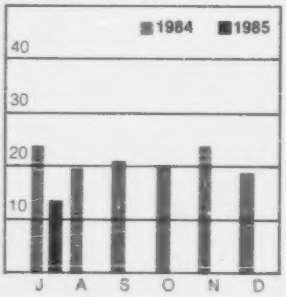


Delivery performance

(Percent reporting deliveries)

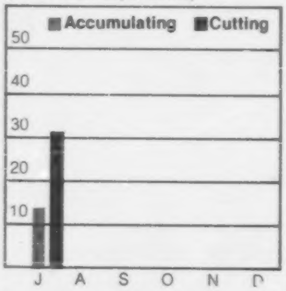


Forward commitments



Inventory strategy

(Percent of respondents)



Source: NAPM

PROCUREMENT STATUS

The lazy, hazy days of summer aren't helping

Not even the ending of summer—normally a time for a seasonal increase in activity—seems to be making much difference in overall procurement climate.

True, there are scattered changes in leadtimes. But they are mostly balancing each other out—keeping *PW*'s exclusive leadtime index squarely in the neutral "50" zone.

Also reassuring: the fact that the vast majority of the more than 150 product lines monitored by *PW* each month have remained virtually unchanged. As one PM succinctly put it, "demand just isn't strong enough to push things out.

Confirmation of this "no sweat" situation also comes from NAPM's vendor performance series where only 4% have reported slower deliveries over the last month. That's the lowest such reading since the recession days of late 1982.

The absence of significant forward commitments is yet another indication that everything is pretty much under control. Last month, for example, only 14% were ordering production materials 90 days or more in advance—down significantly from the 18% figures of the previous two months.

This lack of forward ordering is also resulting in further inventory declines. The 32% of NAPM Business Survey Committee members who reported declines last month was more than twice the 13% noting additions.

If there is any doubt about today's all-out buyers' market, last month was the sixth consecutive monthly period in which no items were reported in short supply.

Leadtimes and availability

Chicago: Trend is toward shorter delays with these weekly leads: Coated and offset paper (1-2), chrome chemicals (1-2), special copper sheet (1), special brass and copper tube (8-10), softwood framing (1), and plyform (2-3). No change in c-r steel or aluminum sheet.

Cleveland: Status quo here—most alloying materials, natural kraft paper, plywood, plastic shrink film and strapping are on demand. Other weekly leads: Cold finish aluminum (10-12), PVC (3-4), corrugated and folding boxes (2-3).

Los Angeles: Modest stretchouts have caused higher waits: grey iron castings (8-10), brass castings (6-8), pumps (12-14), custom storage tanks (12-14), and standard bearings (20-24). Little change in fasteners or standard valves.

Houston: Summer doldrums have kept most leads where they were last month: Corrugated cartons (2), large transformers (17-26), motor control centers (13-26), component parts (1-8), plastic resins (2-3), and stainless fasteners (8-10).

Philadelphia: Waits for electronic components are still shrinking: double layer PC boards (6-8), and multi-layer PC boards (8-10). Also down are special fractional electric motors (to 10-12). General usage motors and standard bearings and fasteners are unchanged.

Pittsburgh: Little change here: plastic bags (3-4), corrugated and folding boxes (3-4), drums (1), laminating papers (6-9), lumber (3-4), steel strapping (2-3), alloying materials (2) paint (4-5), and ton orders of tin (8).

...continued on page 60

Nonferrous markets confound the experts

Robert S. Reichard, executive editor; and Thomas F. Dillon, C.P.M., senior editor

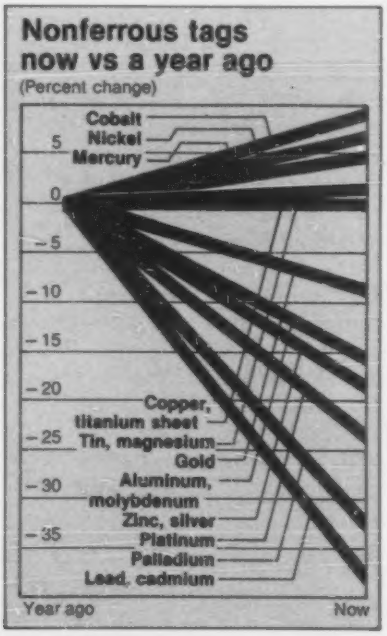
Even the two-and-a-half year old business recovery hasn't been able to dampen one of the longest buyers' markets in the history of nonferrous metals.

This year, for example, overall prices will probably average no higher than they did in the depths of the 1982 recession.

But next year could see some modest recovery. *PW* equations, for example, suggest an overall 5% increase. But that's peanuts compared to the declines of recent years. Point to keep in mind: Even if this projected recovery does materialize, prices in 1986 would still be some 9% under 1980 peaks.

More important, the softness has been across-the-board. Buyers are still calling the signals in aluminum, copper, lead, zinc, and a host of minor metals. Precious metals, too, have been taking their lumps.

Why all this weakness? The answer is not hard to find. There have been a number of different factors behind continuing soft markets:

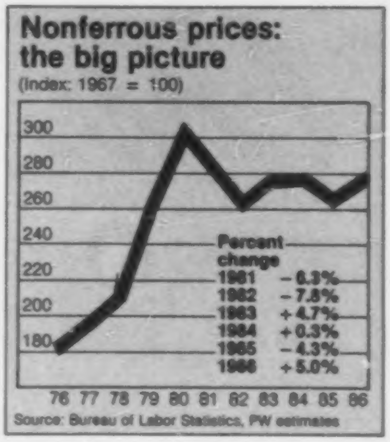

Nonferrous tags now vs a year ago
(Percent change)

- **A world metal capacity glut:** Production potential exceeds demand in almost every important nonferrous sector. Complicating the picture has been Third World countries' need for foreign exchange—a situation that has precipitated all-out metal production even in the face of oversupplied markets.
- **A shift in production mixes:** Even though GNP/GDP continues to advance here and abroad, the types of products being turned out generally require less metal per unit than in the past. Thus, capital equipment, a big consumer of these metals, has not been nearly as strong as some of the high-tech industries which generally require a different mix of basic raw materials.
- **Downsizing and substitution:** Also limiting demand has been the trend toward smaller end-use products (cars, for example) and the switch to plastics and other competing materials.
- **The still-strong dollar:** Even though it is down from previous highs, it still remains at high levels compared to other currencies. It is certainly high enough to attract a flood of cheap foreign metal with low quotes.

All these factors have exacted their toll. Lest there be any doubt on this score, take a look at the detailed "now vs. a year ago" price chart. Few, if any, metals are in the plus column, and some of the declines are eye-openers, with tags on several metals now running upwards of 20% under year-ago levels.

Go back further and many of today's differentials are even bigger. Here are some of the declines (now vs. earlier peaks): copper (42%), aluminum (36%), lead (68%), nickel (26%), and tin (28%).

Where do we go from here? While it would be unrealistic to expect further erosion (many mines and smelters are now operating in the red), it's hard to project any sustained rally.


Nonferrous prices: the big picture
(Index: 1967 = 100)

Source: Bureau of Labor Statistics, PW estimates

Even *PW*'s predicted 5% increase in 1986 may be a little bullish. Wharton Econometrics is calling for only a 3.5% advance in 1986 and only about 4% in 1987.

Copper and aluminum

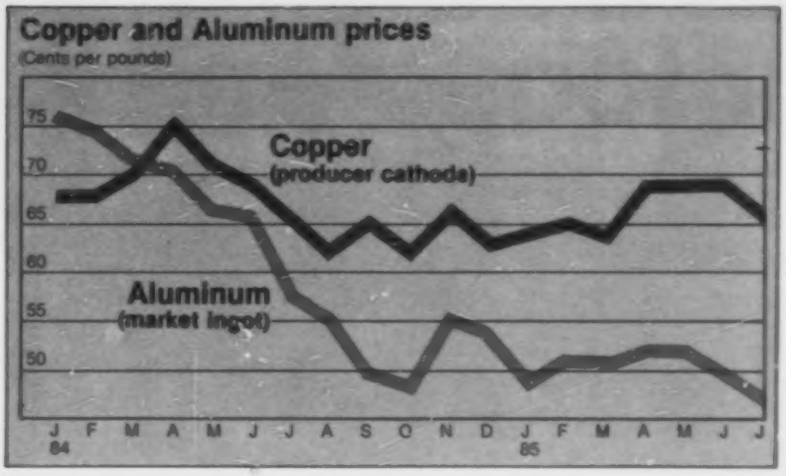
There haven't been too many better years for buyers of aluminum and copper. Not only are prices way down, but vendors are falling all over themselves in an effort to move their stocks of basic metals and fabricated products.

The numbers tell it all. Aluminum ingot now goes for under 50¢/lb —way down from the 75¢/lb quote which prevailed as recently as April 1984. And today's upper 60¢ copper quote represents about a 20% drop from the 83¢/lb level of May 1983.

In both cases, cheap imports have been a major force behind the price easiness. And it's not just in the basic metal sector. There has been a big import surge in aluminum rigid container sheet (the Japanese now hold 10% of the market). And even more significant from an overall viewpoint, the U.S. has now become a net importer of fabricated products.

The picture is much the same in copper where overseas producers of brass mill products are said to be offering material at least 20-30¢/lb cheaper than domestic vendors. This, in turn, has forced some domestic mills to sell 50-60¢/lb under base price levels.

But imports are really just the tip of the iceberg. The underlying cause of the softness has been just too



Copper and Aluminum prices

(Cents per pounds)

much metal. Global supplies are still outrunning global consumption by a considerable margin.

The copper supply situation has been further exacerbated by the failure of producers in Africa and South America to cut production. Result: continuing oversupply, despite the fact that the U.S. copper industry has been cut back to near 60% of its potential.

Copper inventories are falling, however—especially on the exchange level *vis a vis* levels at the beginning of the year. But they will have to fall a lot more before they can translate into any meaningful upward pressure on prices.

High inventories are also a problem in aluminum—despite the fact that U.S. primary producers are operating at only 70-72% of rated capacity. Free World stocks have been put at near 2.4 million metric tons (actually up 250,000 tons from a year earlier). In any case, a drop to near two million would be needed to spark any sustained price rally.

Copper and aluminum demand, on the other hand, has been fairly brisk. This year, the aluminum industry should experience a 4% rise in shipments (to nearly 16 billion lb). Orders, up 8% so far this year, would certainly seem to back up this projection.

Similarly in copper, domestic use looks to be up about 2%—and maybe 3% for the Free World market.

The demand gains won't be enough to sustain any really big price increases. This is especially true in aluminum where more and more buyers are pressing for tolling arrangements (the user supplies metal to a fabricator for processing) with domestic rolling mills—a move toward cost-based pricing to get the full benefit of low ingot prices.

All of this is not meant to imply that prices won't rise a bit as inventories slowly fall, consumption remains fairly strong, and cost pressures mount.

Titanium

Since 1979, U.S. producers have increased sponge metal production capacity from 23,500 tons to 35,500 tons. World capacity has increased from 82,000 tons to 131,000 tons. During this period the yearend price rose from $3.98/lb in 1979, to $7.65/lb in 1981, and then fell to $5.55/lb in 1984.

Actual U.S. consumption rose from 23,937 tons in 1979 to 26,943 tons in 1980 to 31,599 tons in 1981. In 1983 consumption dropped to 16,072 tons, rising again, in 1984, to 24,000 tons.

Today the published price falls in the $3.75 to $4.00/lb range. Little upsurge in demand and more than adequate supply should hold the price fairly stable at this level for the foreseeable future.

Last year, about 60% of titanium metal was used in jet engines, airframes, and space missile applications. About 20% was used in chemical processing, power generation, and in marine and ordnance applications. The remaining 20% was used in steel and other alloys, according to the Bureau of Mines.

Lead

"There is simply more supply than demand and it looks like it will stay that way for quite a while," says Thomas A. Parker, metals purchasing manager, Exide Corp., Philadelphia.

Although the U.S. should have sufficient supplies of 99.99% lead, a sharp increase in battery demand could result in a shortage of the product overseas, which would in turn drive prices up in this country.

However, with supplies ample, prices are expected to remain stable for at least the next six months. Any increase will be limited to a cent or two per pound, bringing the price up to 21¢ or 22¢ per pound.

Zinc

Zinc will be plentiful. The industry's major problem today is overproduction. There are no dramatic new markets—certainly nothing like the switch from a copper to a zinc penny a few years ago, but there is some changeover occurring in the auto industry as more zinc is being used to protect metal from corrosion. This is also happening in other markets such as appliances.

Predictions for the next six months or so are that prices will stay firm—in the low to mid-40¢/lb range for Special High Grade zinc.

Nickel

After climbing from $2.22/lb late in November 1984 to $2.55/lb in June 1985, the price of nickel dropped to $2.37/lb in July. The initial price runup was due to a drop in London Metal Exchange stocks which gave producers a chance to raise prices.

Supply and demand soon stabilized with several producers announcing expansion plans and putting capacity back on line.

Nickel's most important market is the production of stainless and alloy steel, accounting for 44% of its consumption. Some think the domestic demand for nickel will fall off this year because so much stainless steel is being imported. Predictions are for zero growth in nickel demand in the U.S. over the next 12 to 18 months and for a 3% increase in worldwide demand.

A 36-month contract recently negotiated by the United Steelworkers of America and Canada's Inco Ltd. (the largest nickel supplier outside the communist bloc) will also help assure supply. The contract, covering 7,300 hourly workers, substitutes automatic wage boosts with special bonuses linked to the price of nickel.

Inco agreed to pay a 15¢/hr bonus when the average price rises above $2.50/lb. If the price increases to $2.90/lb, workers will get a top bonus of 35¢/hr.

Tin

For the past three or four years, there has been an oversupply of tin, in sharp contrast to the previous 10 years when demand exceeded supply and tin prices rose steadily.

Four years ago, a drop in demand, coupled with excess inventories by miners and smelters throughout the world, led to a steady decline from a peak of $8.00/lb then to a range of $5.00-$5.50/lb now.

Demand bottomed out in 1983 and has been creeping up ever since. The U.S. Bureau of Mines estimates there is at least 70,000 tons of excess tin on the world market. To put that figure into perspective, the U.S. uses about 38,000 tons of primary tin annually. The world market is 150,000 to 180,000 tons yearly.

In addition to the tin being produced, the General Services Administration has been selling tin from the GSA stockpile almost continually for the past 25 to 30 years.

Expanded production in Brazil, Bolivia, and China will also exert additional downward pressure on tin prices. Canada is expected to be an important new supplier of tin, thus adding more pressure to depress prices.

Precious metals

The strong dollar, lower inflation, high interest rates, and technological changes resulting in less use of precious metals in electronics have taken some of the shine off the precious metals markets.

Palladium, for one, is being substituted for gold in electrical contacts through a process called "palladium flashed gold," which reduces costs and weight. One refiner notes that printed circuit boards not so long ago contained three times as much precious metal as they do today.

Market prices for rhodium, another member of the platinum group, recently fell to below $700/troy ounce. Earlier this year rhodium was selling for around $1,200/troy ounce.

Silver prices have been declining since March 1984 when it was getting $10.04/troy ounce. The average daily price was $11.84 in 1983, $8.25 in 1984, and $6.00 to $6.20/troy ounce now.

Gold, which peaked at $850/troy ounce in January 1980, fell erratically until February of this year when it bottomed out at $282. The price now is hovering in the $300 to $315/troy ounce range with no upturn expected as long as inflation remains under control and the dollar stays strong.

Manganese

Manganese supply should remain plentiful for the foreseeable future as demand continues to slump. Since most manganese ore is converted to manganese ferroalloys for use in steel production, demand is closely tied to steel's fortunes. In addition, changes in the steel making process, which are more efficient and require less manganese, point to a continued decline. As one observer puts it, "Manganese is getting hit with a double whammy."

Brass

Considering the weakening price of copper and the relative strength of the dollar, George A. Milne, purchasing divisional manager for Delta Faucet, Indianapolis, believes the price of brass will drop as much as three cents a pound—to 43¢/lb—in the third quarter of this year, producing a buyers' market.

However, he warns, with a continued upsurge in housing construction, this buyers' market could deteriorate in the fourth quarter.

Molybdenum

The price of molybdenum has been falling steadily in recent years dropping from an average of $9.70/lb of concentrate in 1980 to an average of $3.04/lb in 1984—ranging from $2.70 to $3.05/lb in the fourth quarter of last year. This drop is credited to rising producer inventories.

During the first quarter of this year, the price rose to $4.50/lb before settling down to its present range of $3.35 to $3.50/lb—a rise attributed to reports of potential mine shutdowns in the U.S.

Iron and steel production accounts for about 75% of molybdenum consumed in this country. With worldwide supplies adequate and a continued slowdown in U.S. and world steel production, prices should remain soft until there is a pickup in the steel industry.

Cobalt

With world production capacity at about 85 million pounds annually and world consumption in 1984 at around 45 million pounds, there is an ample supply of cobalt.

Of the 85 million pounds capacity, Zaire accounts for 37 million and Zambia accounts for 11 million pounds—56% of world production. The U.S.S.R. is the next largest producer with a capacity of 10 million pounds. U.S. mine production of cobalt stopped in 1971.

Zaire and Zambia set the market price, now at $11.70/lb for electrolytic cobalt. To some degree they have brought some stability to what has been an especially volatile market. In 1980, for example, cobalt sold for an average of $25.00/lb. In 1978, it was only $11.45/lb.

Chromium

As stainless steel goes, so goes the market for chromium. The production of stainless steel and heat-resisting steel accounts for about 81% of chromium consumption in the U.S., one of the world's leading consumers of the metal.

Chromium is contained in chromite and ferrochromium which comes to the U.S. for refining from the Republic of South Africa and from Zimbabwe.

The price has remained stable with South African high-iron chromite selling in the range of $42-$52/ton and chromium metal selling at about $4/lb. The Bureau of Mines expects demand for primary chromium to increase at an average annual rate of 6.5% through 1990. ***PW***

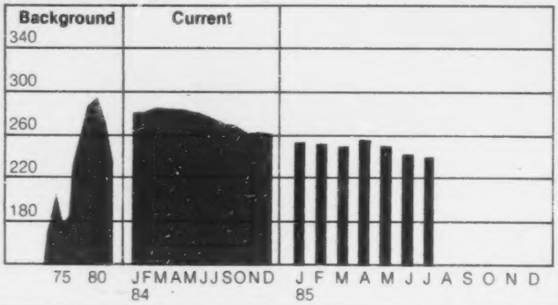
BUSINESS DATATRAK

...continued from page 32

Raw material price barometer

Latest month	240.7
Month before	242.9
Year ago	280.1

(Index: 1967 = 100)



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	367.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	23.90	23.90	23.90
Steel, bars, dlvd. Phila., cwt., merchant quality	23.95	23.95	23.95
Steel, bars, Pitts., cwt.	23.95	23.95	23.95
Steel, bars, C.R., Pitts., cwt.	29.25	29.25	29.25
Steel, plates, Pitts., cwt.	23.25	23.25	23.25
Steel, plates, H.R., Pitts., cwt.	23.25	23.25	23.25
Steel, sheets, C.R., Detroit, cwt.	27.10	27.10	27.10
Steel, strip, C.R., Chi., cwt.	35.30	35.30	35.30
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.475	0.463	0.553
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb.	5.35	5.35	5.20
Brass, red, 85%, [sheet], lb.	1.31	1.29	1.23
Brass, yellow, [sheet], lb.	1.26	1.24	1.18
Cadmium, ton lots, lb.	1.00	1.00	1.55
Copper, electrolytic, wire bars, refd., lb.	0.68	0.66	0.62
Copper sheet, over 24 in., lb.	1.40	1.38	1.32
Lead, common, N.Y., lb.	0.190	0.185	0.280
Magnesium, pig ingot, [99.8%], lb.	1.48	1.48	1.48
Mercury, 20 fl. lots, N.Y., fl	317.00	308.00	295.00
Molybdenum Climax Oxide/bags, lb.	4.65	4.65	4.65
Nickel, electrolytic, producer, lb.	3.20	3.20	3.20
Platinum, producer, oz.	475.00	475.00	475.00
Silver, N.Y., oz.	6.22	6.05	7.67
Tin, Straights, N.Y., lb.	6.48	6.29	6.28
Zinc, Prime West, East St. Louis, lb.	0.41	0.44	0.48
Zinc, die casting alloy, No. 3, lb.	0.485	0.505	0.555
PAPER			
Uncoated book #3 offset, ton	850.00	850.00	850.00
Watermarked bond, ton	985.00	985.00	985.00
Gummed sealing tape, carton	16.22	16.38	16.02
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	495.00	495.00	495.00
Wrapping paper, std. distributor cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	290.00	290.00	350.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	0.292	0.296	0.339
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.04	1.04	1.04
Cotton middling, 1", N.Y., lb.	0.568	0.595	0.622
Printcloth, 48" 80x80, N.Y., spot. yd.	0.60	0.60	0.76
Army duck, 37", 13 oz., yd.	1.70	1.70	1.91
Blended printcloth, 64", 78x54, yd.	0.630	0.680	0.770
20s combed yarns	1.95	1.95	2.10
Wool tops, N.Y., lb.	3.60	3.60	3.60
CHEMICALS			
Acrylonitrile, tanks, lb.	0.455	0.455	0.455
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	210.00
Benzene, petroleum, tanks, Houston, gal.	1.47	1.47	1.28
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	0.58	0.58	0.58
Formaldehyde, USP, 37% [12% to 15% meth.], tanks, lb.	0.106	0.106	0.106
Glycerine, synthetic, tanks, lb.	0.91	0.91	0.81
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.52	0.52	0.54
Naphthalene, crude, tanks, lb.	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.270	0.270	0.305
Polyethylene resin, low density liner film grade (market price), lb.	0.280	0.280	0.410
Polypropylene, homopolymer grade (market price), lb.	0.350	0.330	0.400
Polystyrene, general purpose grade (market price) lb.	0.360	0.350	0.390
Polyvinyl chloride, pipe grade (market price), lb	.270	290	.285
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.30	0.30	0.35
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	157.50	157.50	140.00
Sulphuric acid, 66%, commercial, tanks, ton	56.85	56.85	56.85
Titanium dioxide, anatase, reg., carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.	1.36	1.36	1.33
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	327.75	326.55	307.55
Lumber, 2x2, pine, mbf, cl	304.15	315.75	301.65
Plywood, plyform, ¾", msf, cl	561.50	578.60	567.70
Plywood, ⅝", msf, cl	383.60	381.60	364.05
Cement, bulk, ton, tl	65.44	64.94	63.75
Sand, ton, cl	6.32	6.25	6.07
Ready-mix concrete, 3,000 psi/cu yd., 15 cu. yd.	47.99	47.60	46.73
Crushed stone, 1½", ton, cl	7.75	7.65	7.53
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.81	0.81	0.77
Gypsum sheathing, ½"x1"x8", msf, tl	202.29	211.94	204.57
Brick, common, per thousand, tl	183.70	181.55	173.08
Asphalt paving, AC-20	176.36	175.36	168.86
Concrete sewer pipe, 12", prem. joint, per foot, cl	7.21	7.15	7.04
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl	21.25	21.50	26.00
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	24.75	25.75	30.50
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.740	0.750	0.730
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.813	0.847	0.771
Heating oil, No. 2, Chi., bulk, gal.	0.685	0.695	0.785
Heating oil, No. 2, N.Y., bulk, gal.	0.720	0.740	0.773
Heavy fuel, PS 400, Los Angeles, rack, bbl	26.50	26.50	26.50
Jet kerosene, gal.	0.728	0.690	0.760
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.335	0.343	0.405
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	77.00	72.00	82.00
Steel, No. 1, hvy., dlvd., Chi., ton	73.00	64.00	77.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	0.555	0.540	0.550
Copper, No. 2, East, wholesale buy,	0.475	0.455	0.465
Brass, red, East, wholesale buy, dlvd., lb.	0.515	0.500	0.510
Brass, yellow, East, wholesale buy, dlvd., lb.	0.325	0.325	0.350
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	0.280	0.285	0.345
Alum., mixed clip., E., wholesale buy, dlvd., lb.	0.315	0.315	0.370
Zinc, old, East, wholesale buy, dlvd., lb.	0.110	0.140	0.200
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.105	0.100	0.165
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	10.00	10.00	30.00
Paper, old corrug. box, dlr., N.Y., ton	8.00	8.00	25.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.09	0.10	0.12
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.20	0.21	0.37

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

Quarterly transportation report

Rates favor shippers today, next year

The freight rate picture is looking better and better—at least from the shippers' point of view.

Tipoff comes from Wharton Econometrics, which has pared down its estimates of advances for 1985 to 2.7%—significantly under the 3.3% boost anticipated just three months ago. And that's less than half the 6% increase projected as recently as last December.

It's pretty much the same story for next year when overall shipping bills are expected to sport only a 4.4% increase (vs. the near 5% hike seen just three months ago). Even 1987 doesn't look all that bad, with a 5% increase projected, down from the 5.2% estimate also made three months earlier.

Much of the rate deceleration is attributed to slower economic growth which, in turn, has decreased both demand for shipping and overall cost pressures.

The role of imports is also singled out as a key factor in keeping the lid on rate hikes. Aside from their obvious braking effect on the economy, incoming shipments impact transportation in yet another way. Imports are only hauled once or twice in this country i.e. from the dock to the wholesaler and from there to a retail outlet. In contrast, domestic goods are moved as raw material inputs and between plants before they are ever hauled into the trade chain.

Another key finding of this exclusive quarterly transportation report: Rate moderation will be pretty much across the board—with individual transportation modes shaping up something along these lines...

- **Rail:** Traffic has fallen behind its 1984 pace. For the first half of the year, ton-miles were down 3.4% from the comparable 1984 period. Even heretofore booming piggyback traffic is only about even with last year's levels. Even with some second half pickup, the year as a whole should show only a slight increase.

Rail price increases also look to be quite moderate—averaging in the 2-4% range (seasonally adjusted annual rate) in each quarter and 3% for the year. Next year's rate hikes should average out near 4.4%.

- **Trucking:** Like rail, traffic has fallen behind its year-earlier pace—by more than 5% as of late May, according to the American Trucking Association. Freight rates should grow only slightly faster than they did last year.

For 1985 as a whole, for example, only a 2.8% rate advance is expected. Next year, however, haulers will get more of the increases they have been waiting for, and the average price increase will accelerate to near 4.5%.

- **Air:** Revenues grew 4.6% in 1984 while prices jumped 6.7% as carriers saw an opportunity to recoup their losses the previous year.

This year, however, looks a lot different as the economy slows and energy prices hold steady or even decline. In any event, rate hikes will average out near 3.3% (half that of 1984)—and next year's acceleration will be a modest 4.2%.

- **Barge:** Shipping has been even more sluggish here than in other modes. Rates which dropped 4.2% last year should continue weak. All in all, look for continued overcapacity and cut-throat interindustry competition to squeeze growth and rates this year—with traffic rising only slightly and prices expected to push up only 2.5%. These freight tabs, however, should accelerate to just over 4% in 1986. ***PW***

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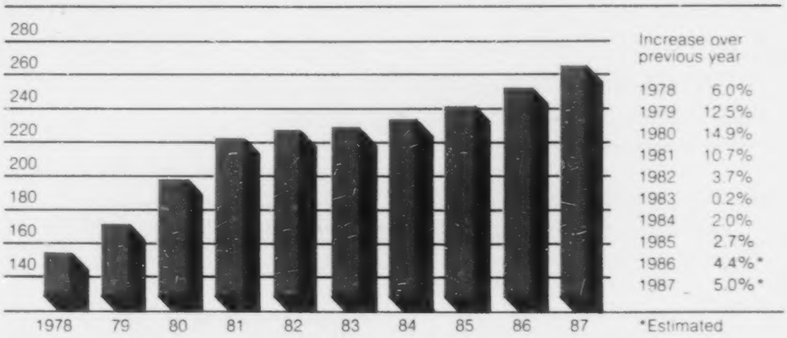
*Each quarter Wharton Econometrics Inc., the Philadelphia-based forecasting firm, prepares these exclusive transportation surveys for **PurchasingWorld.***

PurchasingWorld freight rate index

(1972 = 100)



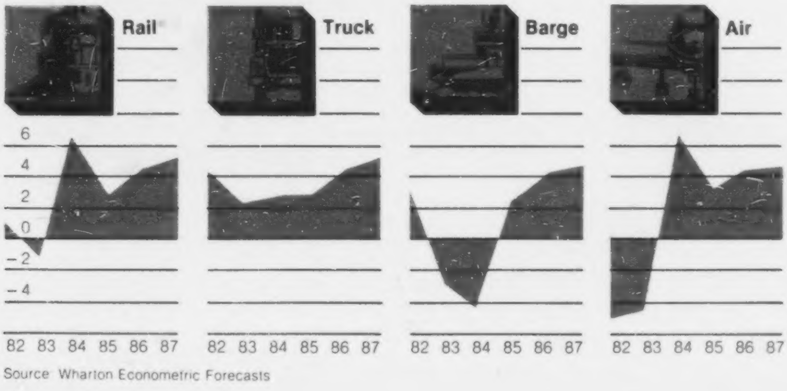
Increase over previous year

1978	6.0%
1979	12.5%
1980	14.9%
1981	10.7%
1982	3.7%
1983	0.2%
1984	2.0%
1985	2.7%
1986	4.4%*
1987	5.0%*

*Estimated

Freight cost outlook by mode

(Percent increase over previous year)



Source Wharton Econometric Forecasts

PurchasingWorld

OCT/1985

Finding better value in office equipment

PurchasingWorld®

Helping you manage
the business of buying

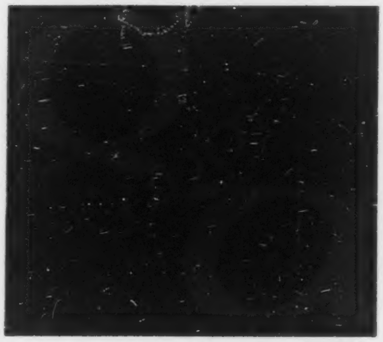
Vol. 29 No. 10-October 1985

Special report: Better value in office purchasing

47 Overview: Finding better value in office purchasing
As purchasing professionals become more involved in the planning and implementation of the automated office, they are asking "Where do we go from here?" In this special update, *PW* takes a closer look at new developments and new products that are shaping the office of the future.

Vendor resource lists: *PW* has compiled listings of the major suppliers in the copier, electronic typewriter, and facsimile markets. Use the listings as a quick reference to gather detailed information about the companies and their products.
54 Copiers **60** Facsimile equipment
66 Electronic typewriters

Product profiles: We asked office equipment manufacturers to present their newest and best products. **53** Copiers
60 Facsimile equipment **64** Electronic typewriters



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PW PREDICTS

Robert S. Reichard, executive editor

Prices won't stay low "forever"

The current price lull should last at least another few months and could easily spill over into early 1986 as well.

Seasonal demand pickup this fall is just not turning out robust enough to reverse recent shakiness. Part of this, of course, reflects the continuing close-to-the vest inventory policies of most firms. But lackluster consumption gains are an even more significant factor. Real GNP should advance at only a 3% annual rate over the fourth quarter—far under the 5-6% rate needed to clear up current supply gluts and to put markets into better balance.

The failure of recent price boosting attempts in chemicals, steel, plastic resins, and many component parts suggests that buyers continue to call most of the signals. The hefty discounts now being offered to nail down volume orders are another indication that it is a buyers' market.

Also indicative of continued easiness are sagging raw material prices. *PW*'s Price Barometer is now running more than 10% under year-ago levels. Uncle Sam's more broadly-based crude material price index is down to 6%.

Wage pressures are surprisingly restrained too. Average hikes for the non-farm business sector are up only 4% over 1984. And unions are no longer insisting on cost-of-living adjustment (COLA) clauses. In fact, the number of workers renegotiating COLAs fell to 173,000 in the first half of 1985 (half the 1984 reading).

Current buyer surveys also add to the overall price optimism. The NAPM Business Survey Committee recently noted that some 20% of responding buyers are now experiencing lower prices.

The latter 5% figure, incidentally, is the lowest reading since the December 1982 when we were at the low point of the recession. Items reported as being lower include aluminum, steel, integrated circuits, folding cartons, corrugated boxes, and caustic soda. A new ***Purchasing World*** survey details an even longer list of items where near-term softness is anticipated.

There is no guarantee that prices will stay as they are forever. If you look hard enough, there are some signs of possible acceleration by mid or late 1986. For one, 10-15% has been whittled off the U.S. dollar since early 1985. This could mean somewhat higher import prices by next spring or summer.

Low productivity also continues to be a long-term worry. Nonfarm business efficiency remained virtually unchanged over the past year, meaning that any wage increases that are occurring will sooner or later have to be passed along.

Other signs of possible price acceleration over the long pull: 1) slowly declining producer stockpiles of metals and other basic raw materials, and 2) global rationalization of some of today's excess capacity.

In any case, DRI's regular quarterly forecast points to about a 2.5% increase in industrial producer prices for 1986 overall—up from this year's expected 0.8% rise. And a new *PW* survey suggests pretty much the same trend. The average increase in procurement costs over the next 12 months is pegged at 3.5%.

Energy

Energy is looking better and better.

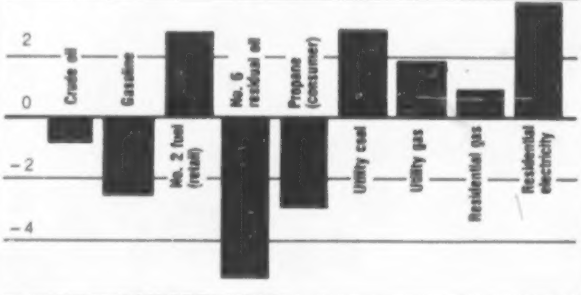
A new DOE study suggests that overall quotes will be no higher a year from now than they are today. In fact, in the case of basic crude oil, gasoline, No. 6 resid, and propane, tags could be under current levels by late 1986.

Nor do the assumptions upon which these projections are based seem all that unreasonable—namely (1) a decline in crude oil prices to about $26/barrel by the end of the year, with little change in 1986, and (2) about 2-2.5% average annual increase in GNP over the forecast period. Those gains would yield a total energy increase of 1.4% this year and 1.9% in 1986.

- **Gasoline:** As stocks are rebuilt and the world oil price edges lower, gasoline tags are projected to fall 4¢/gallon—with 1986 averages put at $1.15/gallon.
- **Heating oil:** Assuming normal weather in 1986, the price here should remain at 1985 levels—with retail quotes expected to average out near $1.03/gallon.
- **Resid oil:** With the British coal strike over, prices should drop 7¢/gallon this year and another 7¢/gallon in 1986 (to nearly 55¢/gallon).
- **Electricity:** Residential prices are projected to rise 4% next year (or slightly above the overall inflation rate)—roughly the same percentage increase as in 1985.
- **Natural gas:** Residential prices should increase by less than 0.5% between 1985 and 1986—averaging out near $6.20/mcf in 1986.

Energy tags: no sweat through '86

(% change, 4th qtr. '86 vs 4th qtr. '85)



Source: Department of Energy

PW PREDICTS

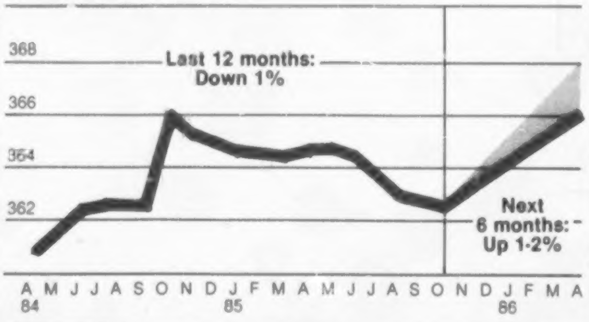
Steel

CURRENT SITUATION: Fourth quarter orders are expected to reach only 19 million tons—on par with year-earlier readings. Inventory paring continues with another 100,000 tons to be cut from consumer stocks over the rest of the year. **This, plus low-priced imports, is keeping prices down**—with some flat-rolled volume buyers reporting $15-25/ton off third quarter leads. A move to cut discounts on oil country tubular goods has failed.

DEMAND: 1986 doesn't look too robust either, especially if GNP gains continue in the low 3% annual range. The big metal-consuming industries may not fare all that well. Auto sales could ease off from this year's 11 million units. Equipment outlays should begin to level off as operating rates remain under preferred levels. And big construction probably won't do much more than equal this year's level. **Even a modest drop in imports won't be enough to push domestic shipments more than a percentage point above estimated 1985 levels.**

SUPPLY: With this demand picture, decreasing metal usage in steel-consuming products, and this year's 75% operating rate, **leadtimes should continue to average in the 4-6 week range.** The absence of concern in current buyer and service center surveys is reassuring, as are latest steel industry investment intentions. One study suggests a 15% jump in capital outlays next year. Coming on top of 1985's even bigger advance, **this should keep capacity at about current levels.**

PRICE OUTLOOK: Today's supply/demand fundamentals make any significant near-term hikes unlikely. **The average U.S. transaction price should remain around $450/ton**—8-9% under pre-recession levels. List prices might inch up over the next six months (see chart). But these will mostly be offset by continuing discounts and low-priced imports.



Steel mill products (list prices)

(Index: 1967 = 100)

Copper

The red metal continues to back and fill in the mid to upper 60¢/lb range, despite the fact that U.S. mines have cut back to nearly 45% of their potential. Behind the lingering easiness: 1) continued all-out production by state-owned Third World countries and 2) disappointing demand. Free World consumption should hit only 7.5 million metric tons this year—only 1.5% above 1984. And stocks, while continuing to drop, are still at above normal levels. There is little to suggest any sustained rally—the metal will be hard put to break the 70¢/lb barrier any time soon.

Aluminum

Ingot market prices remain below 50¢/lb. Bearish factors include 1) relatively slow demand growth (3% globally and only 2% in the U.S.), 2) continuing rises in Free World primary capacity (about a 4% advance is forecasted for 1986), and 3) buyer pressure on prices. On the latter score, there is plenty of excess sheet-rolling capacity here in the U.S.—so buyers are turning to tolling arrangements—buying ingot and jobbing out the rolling. Imports are also a price depressant—foil is the latest product line to feel overseas competition. On a more bullish note, if inventories continue to fall, ingot could move up into the 55-60¢/lb range by next spring.

Electronic equipment

This is still a growth industry despite widely ballyhooed competitive pressures in both semiconductors and many types of office equipment. Henderson Ventures, a major consulting firm in this field, projects a 10.7% overall rise this year. Even the computer and office equipment supgroups should post a 9.5% gain. Next year should bring some favorable advances too—a double-digit increase in military markets should push totals up another 8%. Some recovery in components is also likely in 1986 with 9.5% and 5.3% dollar gains expected in semiconductors and passive components.

1985 Electronic equip. demand

(% change from '84)

Communication	**+13.7**
Computers & office equip.	**+9.5**
Industrial & instruments	**+8.0**
Military	**+14.0**
Consumer	**+5.1**
Semi conductors	**−18.6**
Passive components	**+1.5**

Source: Henderson Ventures

Phthalic anhydride

Recent attempts to boost prices 3¢/lb have failed to hold. Result: Molton and flake types still go for 24¢ and 27¢/lb, respectively. Even this doesn't tell the whole story. Volume buyers are getting an additional 1-2¢/lb off quoted levels. Softness is being caused by lackluster demand—and there is no gain seen for 1985 as a

Paper products

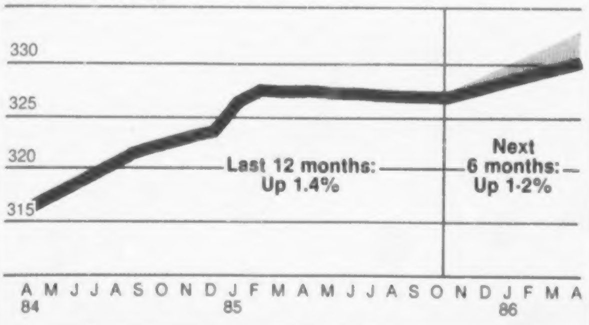
CURRENT SITUATION: Markets are beginning to bottom out with a weaker dollar cutting into import competition. Even so, current prices in some lines are under earlier levels. Linerboard is remaining as low as $265/ton (-24% from last year). Corrugated has declined 5-10% in the last two quarters. Repeated attempts to boost newsprint have failed. But, **previously shaky uncoated white paper is starting to firm**.

DEMAND: Domestic mill output is forecast to be off 1-1.5%. Bigger-than-average declines are expected for unbleached kraft paper (-7%), uncoated groundwood (-4%), and unbleached kraft linerboard (-3%). Corrugated boxes are expected to be short of last year's 270 billion square feet. Declining exports and rising imports are behind some of the drop-off projections. But overall consumption is expected decline by about 0.5%. **Next year doesn't look bullish either**—with overall production gains put at only 1-2%.

SUPPLY: These lackluster demand patterns and slowly rising capacity indicate why operating rates have been slipping. Here are average 1985 estimates (with 1984 rates shown in parenthesis): Uncoated groundwood—88% (92%), uncoated free sheet—90% (91%); coated paper—95% (97%), unbleached kraft paper—94% (97%), unbleached kraft linerboard—93% (97%). **These rates should stay at current levels** as next year's 1-2% production increase is balanced out by new demand.

PRICE OUTLOOK: Look for restrained advances in light of more-than-ample capacity. A somewhat weaker dollar could add bouyancy, but this should be offset by rising overseas capacity. But **it will be some time before linerboard moves back up to the $300/ton level**. Only about a 3% increase is expected for corrugated over the next 6-12 months.

Paper and product prices
(Index: 1967 = 100)



whole. Moreover, little near-term price firming is anticipated as producers continue to jockey for share of the 840 million lb expected to clear the market this year (which amounts to only 76% of the industry's rated capacity).

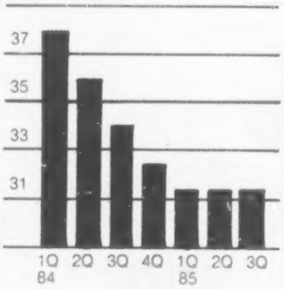
Zinc

The plating and alloying metal is on the ropes as producers give 2-2.5¢/lb discounts off recently lowered list levels. Dealer prices are even lower, and European producers have dropped another $50/mt off their asking prices. U.S. consumption looks like it will drop this year. Given all of the above developments, it is hard to see prices moving above current levels over the next few months. On the other hand, some bounceback into the low 40's (still depressed by historical standards) is possible by early 1986 if demand for autos (the metal's major market) holds up and if recent mine cutbacks are maintained.

High density polyethylene

New boosts ranging up to 5¢/lb could be in trouble. Market quotes are expected to rise only slightly above recent depressed levels (28-30¢/lb for the injection molding grade and 32-35¢/lb for the blow molding grade). While the industry will operate at a high 95% level (demand will rise 9%), this masks the lower operating rate of a few producers including market incursions by swing plants that make both LLDPE and MDPE. Many of these latter producers have been shifting the composition of their output to MDPE, thus softening this market too.

High-density polyethylene
(general purpose molding grade)
(Market price, ¢/lb.)



Sulphur chemicals

Sulphuric acid prices have moved up anywhere from $5-10/ton over the past few months. Blame it on higher labor, transportation, and material costs—with sulphur alone up $30/ton since the last price hike a few years ago. Supplies have also been shaved as byproduct acid production drops—reflecting reduced metal-smelting operations. On the other hand, a $20/ton boost in another sulphur product (carbon disulphide) has failed to hold up because of poor demand from rayon and cellophane users.

Computers

The PC market is again beginning to soften. Signs of the times: 1) IBM is now offering 11% dis-

Copiers

Choosing an office copier isn't easy these days—with more than 200 plain-paper types on the market. Making the job even more difficult is the fact that vendors are making them with many advanced functions. Some of the new developments outlined in *Management World*'s fifth annual copier report:

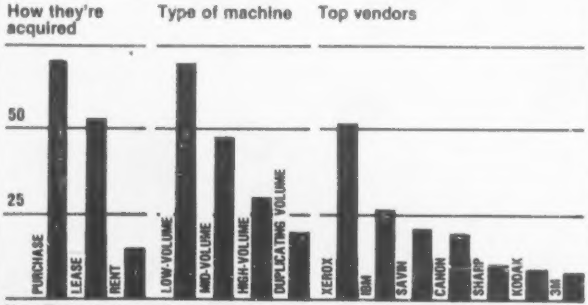
- *Digital scanning and laser imaging.* Originals are scanned with the image then converted to digital signals which are then transmitted to a laser printer where the image is reproduced on plain paper. The big plus is the potential for future links to other office automation products.
- *Amorphous silicon drums.* They have a hard surface that increases reliability and the possibility of running 500,000 copies before being replaced.
- *Increased editing functions.* The original image can be manipulated without destroying the original. This amounts to what can best be described as a form of electronic cutting and pasting.
- *Improved color options.* Vendors are offering copiers with more than one color resident in the machine at any given time. This allows the operator to change toner colors by simply pressing a button.

In addition, features once found only on higher volume machines, such as multiple reduction and enlargement modes, document feeders, sorters, and large-capacity paper supplies—are now prevalent in all volume ranges.

The new study also includes a survey of some 152 users. And here, too, the findings are significant: 1) outright purchase is still the most popular acquisition approach (say 72% of the respondents), 2) some 30% use high-volume copiers, with 20% opting for the even more expensive duplicating volume type, and 3) Xerox is still the most popular maker—followed by IBM, Savin, Canon, Sharp, Kodak, and 3M.

Today's copier market

(% of respondents)



Note: Respondents permitted to check more than one choice
Source: Administrative Management Society

counts on some PC-XT models to corporate customers, 2) Corona Data Systems has halved the price of its IBM compatibles, and 3) Apple Computer is not only offering rebates of $150-250, but is promising a spectacular Christmas promotion. Also, IBM's PC-AT (still at its original $5,795 list price) may be ripe for a price cut—as supplies increase and competing clones come on the market.

Lead

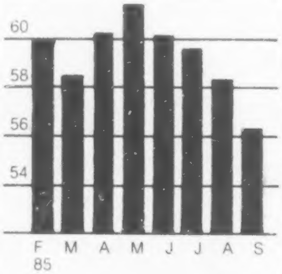
Some modest firming is possible as the battery buying season gets underway. Another positive factor: Asarco, faced with snug concentrate supplies, will indefinitely close its El Paso smelter. But any advance will be quite modest as Free World use lags year-ago levels and inventories remain high. It is hard to see prices moving much above 22-23¢/lb—and they could easily fall again by next spring as battery demand slows again. Nor is the long-term U.S. battery outlook all that bullish. Less lead use per battery will partially offset small unit gains. Domestic battery use of the metal should rise only .5%/year through the rest of the decade.

Cotton

Record harvests, both here and abroad, could drop tags below the already depressed mid-to-upper 50¢/lb range. It's a far cry from the 80¢/lb and higher quotes of just 18 months ago. Aside from the bumper crops, another price depressant has been disappointing U.S. consumption. Domestic mills will take only 5 million bales of this year's estimated 13.7 million bale crop. Even if you add the 4 million bales likely to be exported, that still leaves a huge 4.7 million bales of excess—equivalent to almost a full years' consumption.

Cotton prices

(¢/lb.)



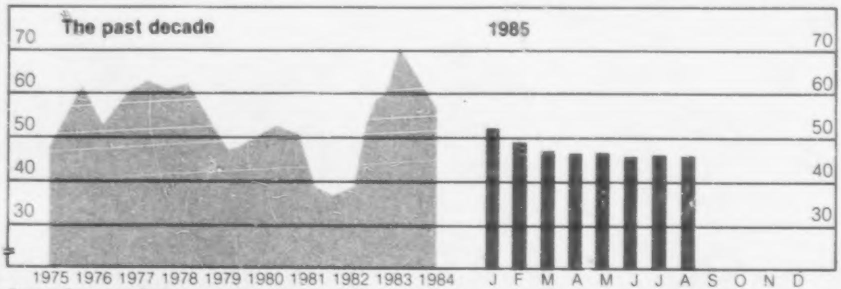
Lumber

Somewhat lower supplies are firming up prices. Right now, popular 2x4s are going for about 10% more than a year ago. Behind the advance: The recent closing of 5% of the nation's lumber capacity and an even larger 7% of its plywood potential. And while some winter fallback can't be ruled out, the betting is that 1986 tags will be even higher. Specifically, if housing starts can be maintained at the current 1.7 million unit annual pace, framing lumber will average out near $220-225/mbf for 1986.

BUSINESS DATATRAK

NAPM business barometer

Based on five indicators (employment, inventories, new orders, production, vendor performance)



Source: Commerce Dept.

KEY ECONOMIC TRENDS

A little lift, but some drift

Count on the economy showing a bit more life with real GNP rising at about a 3% annual rate through early 1986—a lot better than the 1% gain posted in the first six months of this year.

Positive factors working against any recessive trends include 1) still low inventory-sales ratios, 2) interest rates that look to remain well under year-ago levels, and 3) continuing consumer confidence.

But it's a mixed picture. Manufacturing, for example, should continue to disappoint, as factory sales of both hard and soft goods remain essentially unchanged from late winter and early spring levels. If the NAPM Business Survey findings are any indication, this quiet picture is likely to continue as the widely monitored NAPM Business Barometer (see chart) holds in the relatively low 47 range.

The capital goods sector, viewed separately, isn't all that exciting either. When NAPM asked its members if they had revised plant and equipment spending, 32% said they cut original plans—twice as many as said they had revised upward.

That's not to say the market is about to fall out of bed. Capital goods orders are still coming in at a healthy clip, thus assuring that this key area will continue as a basically positive factor.

It should be noted, however, that all of the capital goods lift these days is coming from the military. Machinery orders from civilian activities are doing little more than marking time.

Construction is doing well with awards near all-time highs, suggesting that heavy construction spending will continue for at least another 3-6 months.

And housing is sharing in this gain. Permits (a leading indicator of housing starts) are still coming in at a healthy 1.7 million annual rate and sales of existing homes have been setting a brisk pace in recent months.

Consumer spending is also likely to remain at respectable levels. A new Michigan consumer attitude survey finds that spending on cars and other big-ticket items (as well as housing) is likely to stay high into early 1986.

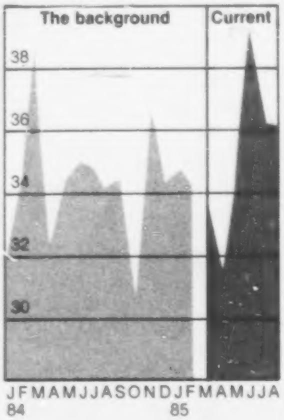
But the auto prediction may be somewhat optimistic, particularly since Detroit has removed its attractive 7.7% financing incentives.

Also on a less positive note, industrial distributor sales have edged lower over the past month or two (see chart). While admittedly this is a volatile series, the decline doesn't augur well for any significant gains in the overall factory sector.

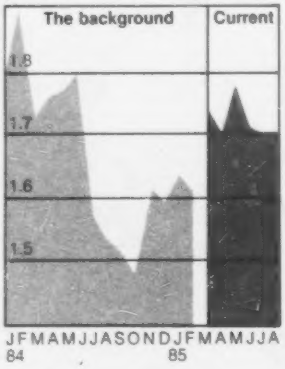
In fact, latest industrial production forecasts call for only 2-2.5% annual rates of increase through mid-1986. Viewed from another perspective, it suggests that quarterly gains will only be in the

Leading indicators

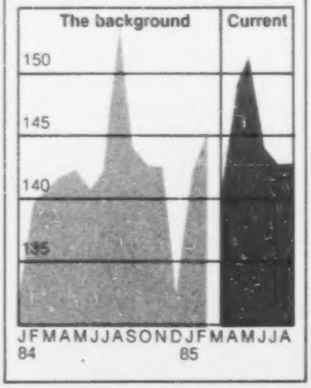
1. Capital goods orders
(Billions $, seas. adj.)



2. Housing permits
(Millions, seas. adj., annual rate)



3. Industrial distributor sales
(Index: 1967 = 100)



0.5% or slightly higher range, hardly the harbinger of a booming economy.

Imports remain a problem. Even with the falling dollar, the U.S. trade deficit this year is likely to go over $130 billion—with textiles, machinery, and autos all continuing to contribute to the overall red ink figure.

But even here things could start to get better as the 10% decrease in the dollar since early 1985 begins to slow imports and makes our exports more attractive.

News from the fleet beat for 1986 models

It's fleet buying season again and here's what some of the the major fleet car leasing outfits are recommending, based on a new survey by the National Association of Fleet Administrators:

▪ **Individual make:** Recommendations here are a matter of what you are looking for—price, image, value, etc. The accompanying box itemizes the specifics of one set of alternatives based on a Peterson, Howell & Heather, Baltimore, compilation.

▪ **Replacement:** Avis feels this should generally be early in the model year, preferably in the Autumn (October, November) and/or Spring (March/April) to minimize depreciation.

▪ **Mileage:** Gelco believes that vehicles should be replaced at 50,000 miles. This recommendation, according to the firm, is based principally on the disadvantage of the penalties assessed on vehicles with higher mileage.

▪ **Car size:** U.S. Fleet Leasing notes that 60% of its purchases are in the mid-size range. This category, says the firm, represents the best business compromise between economy and roominess.

▪ **Model and optional equipment:** LMV Leasing recommends mid-size 4-door, front wheel drive cars. Options should include both cloth interior, cruise control, air conditioning, power brakes, power steering, power door locks, rear window defrost, and AM/FM stereo radio.

1986 model fleet buying choices

▪ **Best value** (embracing a combination of image, fuel economy, safety, power, and resale value): Chevrolet Celebrity CL, Dodge Lancer, Ford Taurus, Oldsmobile Calais, Plymouth Caravelle, Pontiac 6000.

▪ **Best price** (priced about 12% under "best value" category, for those where "up-front" costs are critical): Chevrolet Cavalier, Dodge Aries, Ford Tempo GL, Mercury Topaz GL, Plymouth Reliant.

▪ **Best image** (cars offering employees recognition, status, or inducements to employment): Buick Century Custom, Chrysler LaBaron GTS, Ford Thunderbird, Mercury Sable, Mercury Cougar, Oldsmobile Cutlass Ciera LS, Pontiac 6000 LE.

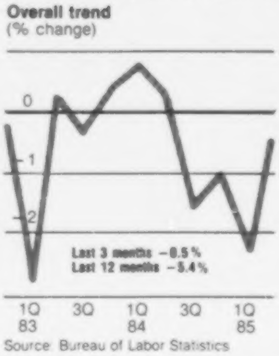
▪ **Full size cars** (where extreme service conditions mandate): Chevrolet Caprice, Ford Crown Victoria S.

▪ **Best mpg** (excellent fuel performance along with reliability and resale value): Chevrolet Cavalier CS, Dodge Omni, Ford Escort, Mercury Lynx L, Plymouth Horizon, Pontiac Sunbird, Renault Alliance DL.

Source: Peterson, Howell & Heather, as reported in the National Association of Fleet Administration Bulletin.

Import prices edge down again

Overall trend
(% change)



Source: Bureau of Labor Statistics

Best buys
(% drop over past year)

Oil products	−7.4
Natural gas & LNG	−19.1
Chemicals	−5.6
Tires	−2.0
Textiles	−2.0
Steel	−3.0
Nonferrous metals	−14.5
Fasteners	−6.4
Metalworking machinery	−3.4
Pumps & compressores	−9.7
Mech handling equipment	−5.0
Office machines	−7.3
Electrical machinery	−8.0
Electronic components	−14.1

Another dip in offshore quotes

Import quotes were down another 0.5% (2% at annual rate) in the latest reported quarter—indicating that the weakening dollar—off more than 10% from its peak earlier this year. Compared to a year earlier, import price declines have been precipitous at 5.4%.

But Washington price watchers say these tags should soon be bottoming out. As one spokesman puts it, "The dollar impact on prices is usually behind by anywhere from 9-18 months. I would expect fewer bargains by 1986."

Meantime, however, the import price weakness remains pretty much across-the-board with individual product areas (*vis-a-vis* the previous quarter) shaping up something like this:

▪ **Crude materials:** Large declines were noted for metal ores (−3.1%), pulp and waste paper (−4.3%), and crude rubber (−1.5%). All three categories are down more than 14% over the last year.

▪ **Fuels:** Import tags dropped for the fifth consecutive quarter, with the latest 3-month slippage of 2.4% due largely to declining petroleum products.

▪ **Chemicals:** Big declines over the last quarter were noted in manufactured fertilizers (−13%) and fats and oils (−14.7%).

▪ **Intermediate products:** Substantial slippage was noted in textiles (−2.2%) and nonmetallic mineral manufactures (−1.6%), with smaller declines noted for steel, rubber manufactures, wood products, and paper and paperboard products.

▪ **Machinery and transport equipment:** Overall averages bucked the trend here by rising 0.9% as increases were recorded for metalworking machinery (+5.0%), general industrial machinery (+2.1%), and electrical machinery (+2.2%). But commuications equipment and office machinery continued to fall.

CURRENT PRICES

Summer ends on pleasant note

Summer has ended on a rather pleasant note. Uncle Sam's overall producer price index actually declined 0.2% over the latest 30-day period.

More significant, current levels are on par with year-earlier ones—further confirming that inflationary pressures are non-existent. Indeed, for some PMs prices could actually be down. That is because Government figures don't always pick up the big discounts being offered these days to nail down volume orders.

Equally encouraging is the fact that the current softness is virtually across the board. Gasoline, diesel fuel, natural gas, liquid petroleum gas, and crude oil prices all declined over

This month's breakdown

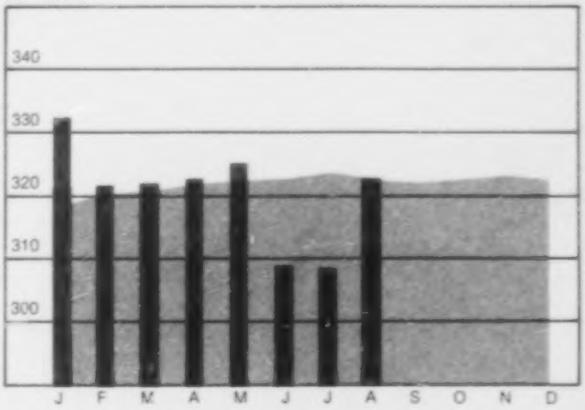
	Latest level (Aug.)	% change from: Month ago	Year ago
Bearings	354.2	0.2	2.8
Bolts, nuts, etc	277.6	−0.1	0.3
Chemicals, inorganic	300.8	−0.7	2.6
Chemicals, organic	358.6	2.2	−1.3
Concrete products	322.8	0.5	3.7
Corrugated cartons	266.6	−1.4	−0.2
Cutting tools, small	286.0	0.4	2.1
Electric lamps (bulbs)	344.6	0.1	4.0
Electronic components	197.6	0.1	1.7
Fans and blowers	359.7	0.0	2.4
Foundry and forge products	364.3	0.2	0.4
Fuel oil (residual)	930.2	3.3	−17.3
Furniture, commercial	309.3	0.2	3.7
Gasoline	575.2	−2.2	3.8
Glass, flat	226.4	1.6	3.1
Glass containers	381.5	0.8	4.2
Gypsum products	338.1	−0.1	−6.0
Hand tools	375.2	0.1	4.1
Hand tools, power driven	233.6	0.1	4.2
Industrial furnaces	385.4	0.1	2.6
Integrating and measuring instruments	232.5	0.4	1.4
Internal combustion engines	347.2	0.0	3.0
Lubricating oil	N.A.	N.A.	N.A.
Lumber millwork	313.9	0.0	2.2
Material handling equipment	295.8	0.1	1.9
Metal containers	357.9	−0.1	1.7
Metal mill shapes (nonferrous)	308.3	0.3	−4.5
Metal tanks	306.1	0.2	0.1
Motors and generators	351.2	−0.2	3.2
Motor trucks	293.7	0.1	4.4
Office and store equipment	154.9	0.0	0.8
Paperboard	266.3	−2.5	−6.6
Paper boxes and shipping containers	268.9	−1.6	1.8
Paper office supplies	239.1	0.2	−1.8
Paint	277.1	−0.5	0.3
Plastic resins	305.2	−0.9	−1.6
Precision measuring tools	263.2	0.0	3.9
Pumps and compressors	357.0	0.2	2.4
Refractories	372.2	0.0	2.9
Rubber belts and belting	337.6	−4.3	−3.2
Scales and balances	229.2	−0.1	−1.3
Steel products	363.4	−0.1	−1.4
Switchgear	278.0	0.1	−0.1
Textiles, synthetic fibers	155.0	−0.7	−3.1
Textiles, gray fabrics	150.2	−0.9	−2.7
Tires and tubes	236.7	−0.7	−2.9
Transformers and power regulators	232.3	0.5	1.3
Welding equipment	291.7	0.0	1.2
Wire and cable	205.5	0.7	1.6

Industrial prices

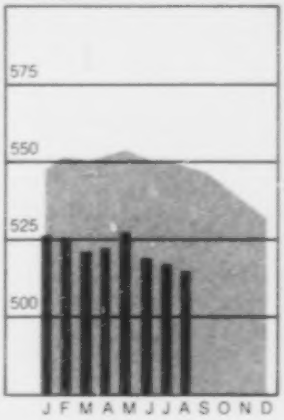
(Index: 1967 = 100)

1984 ▨ **1985** ■

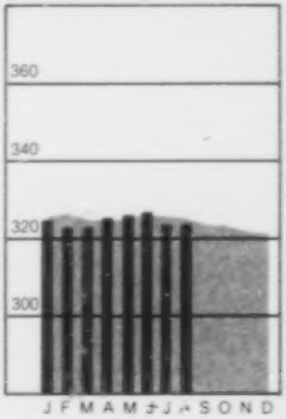
All items



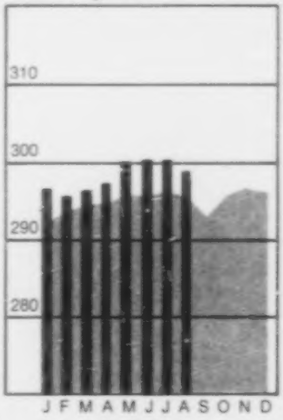
Raw materials



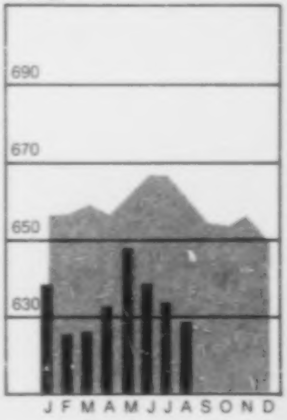
Semifabs, components



Finished goods

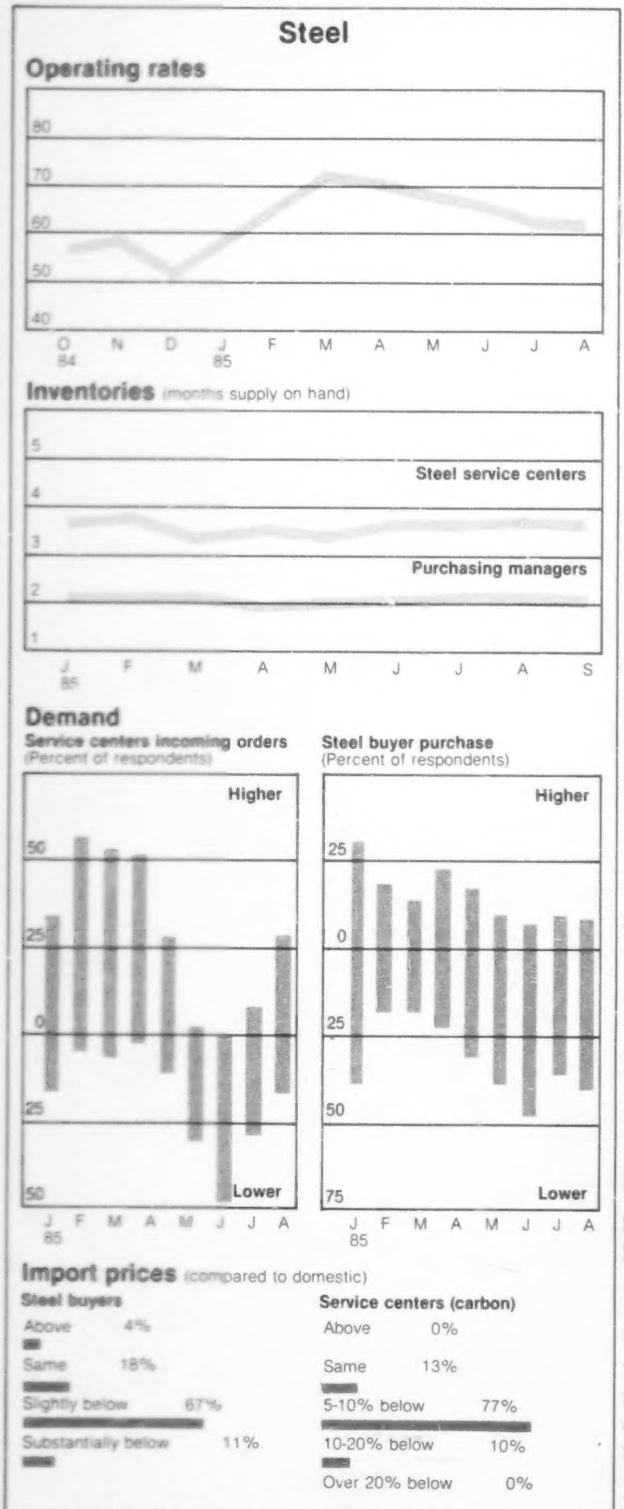


Energy



Source: Bureau of Labor Statistics

BUSINESS DATATRAK



Source: Steel Service Center Institute, NAPM Steel Buyers Committee

the last month. Only residual fuel prices showed any upward tendencies.

Metals also remain quite shaky. Declines have hit steel, aluminum, lead, and zinc.

A similar situation is noted in paper where paperboard fell another sharp 2.5%, dropping these quotes more than 6.5% from year-ago levels. And corrugated cartons, taking their cue from the paper board decline, also dropped again (by another 1.5%).

Also on the soft side were construction materials (sparked by declines in cement and plastic building prices), plastic resins, wood pulp, synthetic fibers, grey goods, inedible fats and oils, and rubber belts and belting.

Inorganic chemicals were down too—although this tended to be offset by newly posted increases in organic chemicals.

Capital goods were about the only major product group to advance. But the increase was quite small (0.2 or about 2.5% at annual rate)—as boosts were recorded for pumps and compressors, printing trade machinery, and integrating and measuring instruments.

STEEL SCENE

PMs and SSCs differ on outlook

The nation's steel distributors are turning a bit more optimistic about near-term prospects.

A fairly substantial 29% of those queried in the latest Steel Service Center Institute survey, for example, see an increase in incoming orders over the last three months of this year. That's the first time since April that those anticipating increases outnumbered those braced for declines.

Viewed from another perspective, some 84% of the surveyed warehouses now expect incoming orders to stay the same or increase—up significantly from the 51% and 72% figures of the previous two months. If true, it means another banner year for these steel middlemen.

Behind all this optimism is the increasing emphasis on just-in-time inventorying—a trend which helps funnel a greater percentage of the overall steel business into service centers.

On a less bullish note, industrial buyers aren't nearly as optimistic as their distributor brethren. Only 9% of these PMs see a step-up in metal purchases—about the same number as the past few months and far under the 50% who anticipate further retrenchment.

Inventories, meantime, are edging fractionally lower. But both service centers and buyers are still not satisfied. The majority of both groups (58% of the distributors and 52% of the buyers) saying current steel stocks are too high.

A substantial number of both groups, as might be expected, are therefore planning on further stock retrenchment—54% and 48% for service centers and buyers.

This could mean as much as another 100,000 tons reduction in their combined holdings over the next three months. Add in earlier paring, and buyers alone will probably end the current year with as much as a half million less tons than year-earlier levels.

One reason for this—in addition to faster deliveries—is the continuing ready availability of all major items. In fact, virtually all of the distributors and buyers queried see no supply problems through the year end and into early 1986.

Another interesting finding of both surveys: Import bargains are still common, despite almost a year of import quotas. Some 87% of queried steel service centers say imported carbon steel is under comparable domestic levels. In the case of stainless, the figure is an even higher 94%—with nearly one out of five putting the price advantage in the 11-20% range.

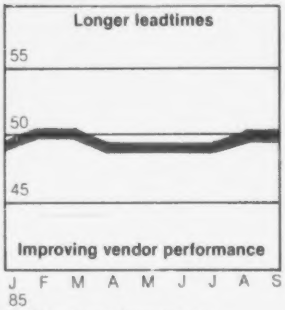
As for steel buyers, some 78% note under comparable domestic level availability—with 11% dubbing the price break as "substantial" (compared to the less than 5% noted for the previous two months).

Nor do these same buyers expect to be less dependent on foreign steel over the next six months. Implication: Imports are likely to stay high, despite steel quotas. Right now, for example, the betting is that as much as 20 million tons of metal could enter the country in 1986—not that much under this year's estimated 22.5-23 million ton level.

Monthly procurement status report

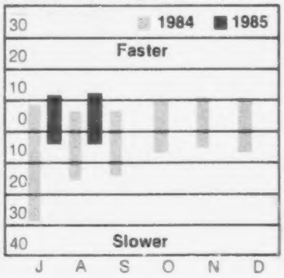
Leadtime index

A "diffusion" index based on 158 key commodities. Avove "50" indicates a tendency for leadtimes to stretch out. Below "50" suggests improving vendor performance

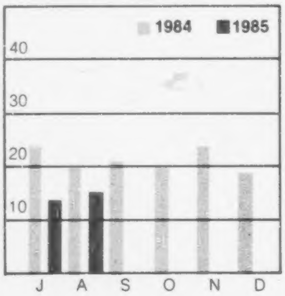


Delivery performance

(Percent reporting deliveries)

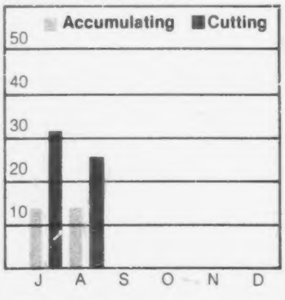


Forward commitments



Inventory strategy

(Percent of respondents)



Source: NAPM

PROCUREMENT STATUS

At ease, there's no squeeze

Still no problems of any consequence on the industrial procurement front, despite the modest pickup in business that seems to be shaping up for the last few months of this year.

That's pretty much the picture no matter what product line.

Behind all this easiness: plenty of excess capacity. At latest report, the typical U.S. manufacturing establishment was operating at only around 80% of capacity, with durable goods falling a percentage point or so below this overall average.

That's why leadtimes have remained at their low levels in recent months. Where there have been some isolated stretchouts, they have been offset by shrinkages in other areas.

Also suggesting an easier situation are continuing reports of faster deliveries by vendors. The NAPM Business Survey Committee, monitoring this on a month-by-month basis, reports that 13% of those queried have recently noted speedups—outnumbering those noting slowdowns by a 3:1 margin. That's the widest speedup-slowdown gap since the closing months of the 1982 recession.

Nor is this problem-free purchasing environment likely to change anytime soon. Operating rates, for example, should stay at about where they are now, as small increases in production are balanced out by new capacity coming on stream. Add in projected gains in imports, and virtually all the PMs queried by *PW* now project a continuation of the current buyers' market—not only through the end of the year, but probably well into 1986.

Leadtimes and availability

Chicago: Special brass and copper rods are out to 5 weeks because of U.S. plant closings. Copper and brass tube has jumped 1/2 week (to 1). PVC resins have come in (to 3) and softwood sheathing (to 1-2). Holding steady are steel, electronic components, and MRO items.

Cleveland: Improvement in maintenance paint (down to 2 weeks). Hardwood lumber has stretched (to 3). Unchanged: waterproof papers (5-6), plastic shrink film (3), corrugated boxes (2-3), folding boxes (2-3), 2-ply fiber drums (2-3), polyethylene film (3) and aluminum (10-12).

Los Angeles: Several items have moved in: grey iron castings (6-8), brass castings (4-6), pumps (10-12), custom seals and gaskets (4-6). Unchanged: galvanized steel (12-14) and aluminum tubing (6-8).

Houston: Centrifugal compressors are in to 10-12 months, as are pumps (4-7 months), and high pressure heat exchangers (7-10 months). Holding firm (in weeks): high-density polyethylene and polypropylene (2-3), galvanized steel coils (3), and plastic bottles (4).

Philadelphia: Hex-shaped stainless bars are in (to 14 weeks). Other steel items are unchanged. Leads (in weeks): carbon round coil (8-10), aluminum bar, sheet, and extrusions (4), high-temp metals (8-10), copper and brass products (4-5), and standard fasteners (stock to 4).

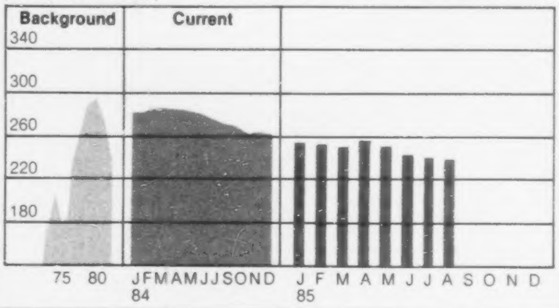
Pittsburgh: A quiet month here. Typical weekly leads: Paper bags (4-6), corrugated boxes (3-4), wirebound boxes (4-5), drums (1), lumber (3-4), steel strapping (2-3), maintenance paint (5), polyethylene (5), PVC (6), alloying metals (2), and copper mill products (6).

BUSINESS DATATRAK

Raw material price barometer

Latest month 240.0
Month before 240.7
Year ago 275.6

(Index: 1967 = 100)



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	367.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	23.90	23.90	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	23.95	23.95	23.95
Steel, bars, Pitts., cwt.	23.95	23.95	23.95
Steel, bars, C.R., Pitts., cwt.	29.25	29.25	29.25
Steel, plates, Pitts., cwt.	23.25	23.25	23.25
Steel, plates, H.R., Pitts., cwt.	23.25	23.25	23.25
Steel, sheets, C.R., Detroit, cwt.	27.10	27.10	27.10
Steel, strip, C.R., Chi., cwt.	36.18	35.30	35.30
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.475	0.475	0.495
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb.	5.35	5.35	5.20
Brass, red, 85%, [sheet], lb.	1.29	1.31	1.26
Brass, yellow, [sheet], lb.	1.24	1.26	1.21
Cadmium, ton lots, lb.	1.00	1.00	1.55
Copper, electrolytic, wire bars, refd., lb.	0.66	0.68	0.65
Copper sheet, over 24 in., lb.	1.35	1.40	1.35
Lead, common, N.Y., lb.	0.190	0.190	0.260
Magnesium, pig ingot, [99.8%], lb.	1.48	1.48	1.48
Mercury, 20 fl. lots, N.Y., fl.	317.00	317.00	308.00
Molybdenum, oxide, dealer lb.	3.15	3.09	3.74
Nickel, cathode, dealer lb.	2.30	2.35	2.21
Platinum, dealer, oz.	318.00	263.00	326.00
Silver, N.Y., oz.	6.04	6.22	7.20
Tin, Straights, N.Y., lb.	5.95	6.18	6.20
Zinc, Prime West, East St. Louis, lb.	0.41	0.41	0.48
Zinc, die casting alloy, No. 3, lb.	0.485	0.485	0.545
PAPER			
Uncoated book #3 offset, ton	850.00	850.00	850.00
Watermarked bond, ton	985.00	985.00	985.00
Gummed sealing tape, carton	16.22	16.22	16.02
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	495.00	495.00	495.00
Wrapping paper, std. distributor cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	290.00	290.00	350.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	0.258	0.292	0.359
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.04	1.04	1.04
Cotton middling, 1", N.Y., lb.	0.566	0.568	0.622
Printcloth, 48", 80x80, N.Y., spot. yd.	0.62	0.60	0.77
Army duck, 37", 13 oz., yd.	1.70	1.70	1.91
Blended printcloth, 64", 78x54, yd.	0.680	0.630	0.770
20s combed yarns	1.95	1.95	2.10
Wool tops, N.Y., lb.	3.60	3.60	3.60
CHEMICALS			
Acrylonitrile, tanks, lb.	0.455	0.455	0.455
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	210.00
Benzene, petroleum, tanks, Houston, gal.	1.47	1.47	1.28
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	0.58	0.58	0.58
Formaldehyde, USP, 37% [12% to 15% meth.], tanks, lb.	0.106	0.106	0.106
Glycerine, synthetic, tanks, lb.	0.91	0.91	0.81
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.52	0.52	0.54
Naphthalene, crude, tanks, lb.	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.270	0.270	0.305
Polyethylene resin, low density liner film grade (market price), lb	0.280	0.280	0.350
Polypropylene, homopolymer grade (market price), lb.	0.350	0.350	0.400
Polystyrene, general purpose grade (market price) lb.	0.360	0.360	0.390
Polyvinyl chloride, pipe grade (market price), lb	.250	.270	.260
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.30	0.30	0.35
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	157.50	157.50	147.50
Sulphuric acid, 66%, commercial, tanks, ton	66.86	56.85	56.85
Titanium dioxide, anatase, reg., carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.	1.36	1.36	1.33
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	322.35	327.75	312.75
Lumber, 2x2, pine, mbf, cl	289.85	304.15	298.15
Plywood, plyform, ¾", msf, cl	583.10	581.50	576.80
Plywood, ⅝", msf, cl	382.45	383.60	373.05
Cement, bulk, ton, tl	64.91	65.44	63.75
Sand, ton, cl	6.35	6.32	6.07
Ready-mix concrete, 3,000 psi/cu.yd., 15 cu. yd.	47.99	47.99	46.87
Crushed stone, 1½", ton, cl	7.80	7.75	7.27
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.81	0.81	0.78
Gypsum sheathing, ½"x1"x8", msf, tl	207.94	202.29	205.57
Brick, common, per thousand, tl	183.70	183.70	173.08
Asphalt paving, AC-20	176.97	176.36	169.53
Concrete sewer pipe, 12", prem. joint, per foot, cl	7.13	7.21	7.04
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl.	22.25	21.25	26.25
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	28.75	24.75	30.50
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.785	0.740	0.740
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.774	0.813	0.796
Heating oil, No. 2, Chi., bulk, gal.	0.768	0.685	0.795
Heating oil, No. 2, N.Y., bulk, gal.	0.770	0.720	0.808
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.50	26.50	26.50
Jet kerosene, gal.	0.803	0.728	0.780
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.320	0.335	0.410
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	75.00	77.00	87.00
Steel, No. 1, hvy., dlvd., Chi., ton	71.00	73.00	80.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	0.550	0.555	0.550
Copper, No. 2, East, wholesale buy,	0.470	0.475	0.470
Brass, red, East, wholesale buy, dlvd., lb.	0.510	0.515	0.515
Brass, yellow, East, wholesale buy, dlvd., lb.	0.330	0.325	0.360
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	0.295	0.280	0.340
Alum., mixed clip , E., wholesale buy, dlvd., lb.	0.325	0.315	0.360
Zinc, old, East, wholesale buy, dlvd., lb.	0.110	0.110	0.200
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.110	0.105	0.165
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	10.00	10.00	30.00
Paper, old corrug. box, dlr., N.Y., ton	8.00	8.00	25.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.09	0.09	0.12
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.19	0.20	0.37

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

MANUFACTURING/OEM EDITION

S. African unrest jeopardizes supply of strategic metals

The ground rules for strategic metals procurement are changing—and changing fast—due to the political unrest and strife in South Africa over its policy of Apartheid.

The seriousness of the situation cannot be underestimated. As the chart shows, we are highly dependent on South Africa for several materials of critical importance to the steel, aerospace, defense, and electronics industries.

Note that this dependency is not so much on gold (the metal most associated with South Africa) as it is on such other metals as platinum, palladium, rhodium, chromium, manganese, vanadium, and even cobalt (which has to be moved out of Zambia by S. African transport).

A recent study, for example, found that over a three-year period, 55% of our chromium, 49% of our platinum, and 44% of our vanadium came from the Union of South Africa.

This isn't a problem only for the U.S; it affects the entire Free World. S. Africa produces 88% of the western world's rhodium, 78% of its platinum, 62% of its vanadium, and 45% of its manganese.

The South African Metal Impact

U.S. dependence on S. Africa

Chromium	55%
Platium	49%
Vanadium	44%
Cobalt	61%
Manganese	39%

Source: Commerce Dept. office of Strategic Resources

Free-World dependence on S. Africa

Platinium	78%
Palladium	32%
Chromium	30%
Manganese	40%
Vanadium	62%
Antimony	25%

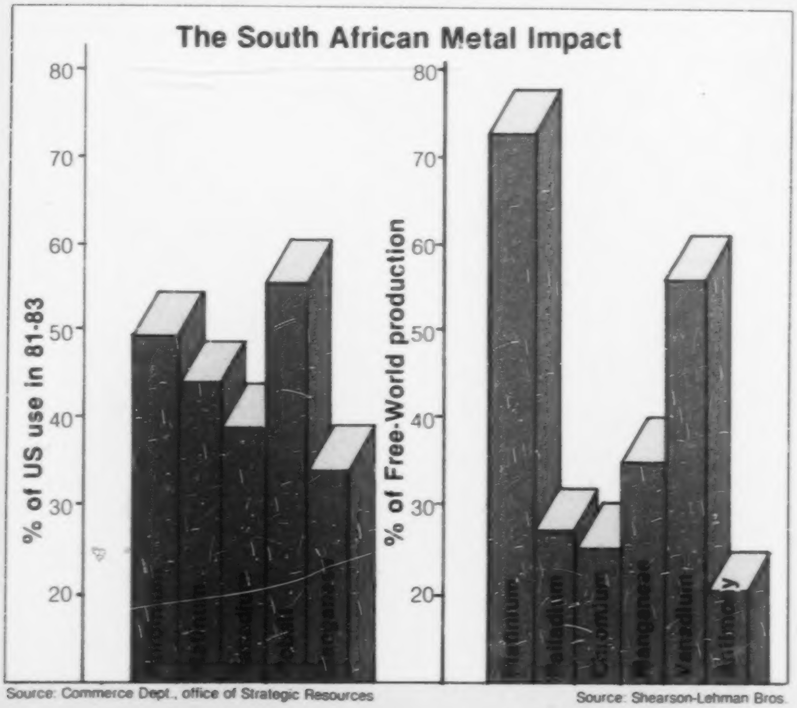
Source: Shearson Lehman Bureau

Not suprisingly, Free World prices have suddenly begun moving up after years of bargain-basement selling. Substantial increases have hit virtually all of the so-called platinum-group metals. The only reason some of the other metals haven't been impacted yet has been the huge inventory gluts in these markets.

South African problems will probably force a reappraisal of our overall stockpile goals. A few months ago, the official stance was to cut tonnages. While things are still too fluid to discern any definitive changes at this point, reports coming out of Washington indicate that all projected disposals of strategic materials are now on hold.

One metal analyst told *PW* that price firmness is likely to continue for these metals for some time to come, even if the current conflicts in South Africa can somehow be managed. In his words, "While I don't rule out some near-term corrections, the political differences in South Africa are just too fundamental to allow any return to old pre-summer price levels."

These important metals will certainly bear close watching in the months ahead—contrasted to still-glutted base metals such as copper, aluminum, lead, and zinc. If things worsen in that country, further run-ups will be surely in the offing. **PW**



Source: Commerce Dept., office of Strategic Resources

Source: Shearson-Lehman Bros.

In this section

S. African unrest jeopardizes strategic metals PW1

Buying precious clad metals is no longer an easy job PW2

Selecting and buying O-rings ... PW6

Computer puts bearings in a box PW10

Smart buying leads to new container PW11

Producer prices: three acts, same scenario through 1987

Lackluster economic growth will hold the lid on price increases. Overall industrial producer quotes should rise less than 1% this year and only about 2.5% in 1986.

The new projections, contained in Data Resources Inc.'s (DRI) latest *Cost Forecasting Service Report*, also suggest moderation in virtually every single commodity area detailed in the table alongside. Note, for example, that of the 25 sectors covered, not one shows a price increase in excess of 7% over the next four quarters.

DRI also cites soft energy tags and labor restraint for these optimistic numbers. On the labor front, for example, DRI estimates hourly earnings will move up only 3.2% this year, 4.1% in 1986, and 5.1% in 1987. And even these will be tempered with about a 1.3% average annual increase in productivity.

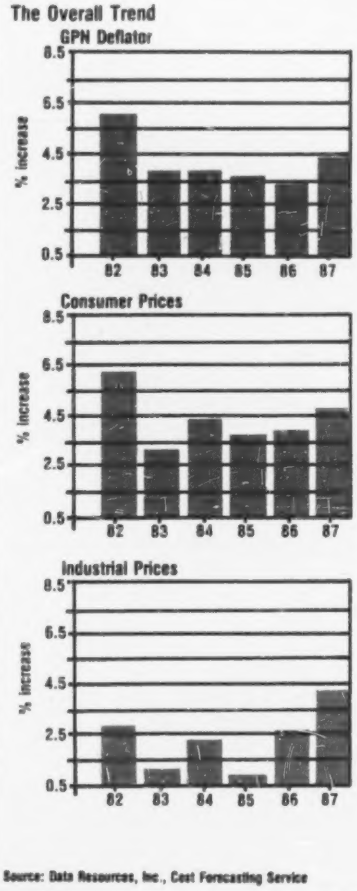
But as suggested, these advances will be manageable, with individual sectors over the 1985-87 period shaping up along these lines:

- **Crude oil**: Combined growth restraint, excess global production capacity, and the resistance by non-OPEC nations to limit their output should cause sliding prices through the first quarter of 1987.
- **Natural gas:** As oil tags fall, gas will be increasingly pressed to remain competitive. Result: Prices will decline 2.5% next year after slipping 1.7% in 1985. But firming crude oil and a stronger economy should lead to a slight 0.5% increase in gas by 1987.
- **Electricity:** Relatively flat coal costs and declining interest rates through mid-1986 will help ease utility costs and relieve electricity price escalation. The producer price index for electricity should advance only at only a 2.9% rate in 1986.
- **Chemicals:** Thanks to weak cost pressure over the next few years, producers will not seek sizable price increases despite rising output levels. The producer price index for industrial chemicals will therefore advance at annual rates of 2.3% and 2.9% in 1986 and 1987 respectively.
- **Pulp and paper:** The absence of cost pressures here, too, will help as chemical and energy inputs post real declines through 1987. This should cause the torrid price escalation of last year (an 8.1% surge) to give way to more restrained 2.5% and 5.5% advances, after the 0.4% in 1985.
- **Steel:** Quotas along with healthier growth rates in late 1986 will ultimately firm product pricing—in sharp contrast to 1985 when only a 0.9% increase in the overall steel and mill product index is anticipated. For 1986 and 1987, however, the increases will be a bit stronger—3.5% and 4.5%.
- **Nonferrous metals:** Depressed prices are projected to persist well into the next year as slow growth undermines the market. Moreover, declining interest rates will spark renewed vigor by late 1986, with prices increasing about 1.6% per quarter.
- **Machinery and equipment:** Price escalation, following labor and material cost trends, will show only modest increases over the next few years. The projected yearly gains: 2.1% this year, 3.8% in 1986, and 5.6% in 1987.
- **Electronic components:** Active components will remain soft. In some cases, they will continue to edge lower. This is particularly true for the digital MOS IC price index, which will decline sharply over the three years ending 1987 (down 11.0%, 6.1%, and 2.1% in each respective year). Behind the declines: falling prices of new dynamic memory devices and intense Japanese competition.

PW

Prices through 1987

The Overall Trend



Source: Data Resources, Inc., Cost Forecasting Service

The Detailed Picture

(comparison of third quarter pricing)

Product	Percent Change 85/84	Percent Change 86/85	Percent Change 87/86
Raw materials, energy			
Industrial chemicals	−0.4	2.1	3.3
Miscellaneous chemicals	1.9	3.7	3.3
Pulp & paper	−1.2	3.4	5.8
Manufacturing supplies	1.9	4.2	4.5
Middle distillate fuels	−6.2	−1.3	0.7
Metals			
Steel mill products	0.6	4.0	4.7
Steel strip, H.R. carbon	0.5	5.4	5.0
Steel plate, non-flow, carbon	−0.5	4.0	5.5
Foundry & forge shop products	0.5	3.7	4.5
Primary aluminum (ex billet)	−2.5	0.5	6.0
Domestic copper cathode	2.8	3.8	7.1
Pig lead, common	−31.8	6.2	5.9
Titanium mill shapes	−4.3	4.7	7.1
Components			
Hardware	2.7	2.8	3.9
Misc. metal products	2.9	4.2	3.9
Electronic components	2.5	4.3	4.7
Capacitors	−0.3	3.7	4.6
Construction			
Paint materials	1.9	1.6	6.8
Plastic construction products	−5.1	3.0	3.3
Concrete ingredients	4.1	6.5	6.7
Concrete products	3.2	6.3	5.9
Machinery			
Construction machinery	1.5	5.6	6.3
Pumps & compressors	2.2	4.9	4.5
Integrating & measuring instruments	2.0	3.1	3.9
Oil and gas field machinery	0.2	3.4	4.8